



Provider User Management Program User Guide

To accompany ECHO 10.0

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PREFACE

PUMP (Provider User Management Program) is a web-based User Interface (UI) tool that enables Earth Observing System (EOS) Clearing House (ECHO) data providers/partners to manage their ECHO metadata. This document provides basic information on the use of the PUMP User Interface. It describes what PUMP is, where to get it, and how to use it.

CONVENTIONS

All references to time are in Universal Time Coordinated (UTC).

Data Partners are also referred to as Data Providers.

Client Partners are also referred to as Client Developers.

Words in **bold** text are key words or concepts.

Best practices, tips, or warnings appear in italicized, boxed text.

REFERENCES

The following documents and websites are referenced in this User Guide.

- ECHO 10.0 Operations User Guide
- ECHO 10 Data Partner User Guide
- ECHO 10 Client Partner User Guide
- Ingest for ECHO 10 User Guide and Reference Manual
- ECHO Forms Specification
- ECHO Data Model Entity List on the ECHO website at http://www.echo.nasa.gov/data_partners/ECHO3.shtml
- Data Partner Tools http://www.echo.nasa.gov/data_partners/data_tools10.shtml
- Ordering options for SAR data http://www.echo.nasa.gov/data_partners/data_docs/asf_frame_v2.xml
- ECHO Home Page <http://www.echo.eos.nasa.gov/>
- ECHO References <http://www.echo.eos.nasa.gov/reference/index.shtml>
- ECHO Data Partners http://www.echo.eos.nasa.gov/data_partners/index.shtml
- ECHO Client Partners http://www.echo.eos.nasa.gov/client_partners/index.shtml
- ECHO 10 Web Services API
 - Operational System: <http://api.echo.nasa.gov/echo/ws/v10/index.html>
 - Testbed: <http://testbed.echo.nasa.gov/echo/ws/v10/index.html>
 - Partner Test: <http://api-test.echo.nasa.gov/echo/ws/v10/index.html>

CHAPTER 1. BACKGROUND (HOW PUMP RELATES TO ECHO)

The primary reason for designing the EOS ClearingHUse (ECHO) was to increase access to Earth science data and services by providing a system with a machine-to-machine interface, that is, an Application Programming Interface (API).

ECHO functions as a metadata clearinghouse of Earth science metadata for a wide variety of partners, enabling the science community to exchange information. Data Partners provide the ECHO community with metadata representing their Earth science data holdings. ECHO technology in turn provides services for Client Partners and Data Partners and supports efficient discovery and access to Earth science data.

ECHO also functions as an order broker for the data, and offers services applied to that data. ECHO provides a portal on the internet where ECHO clients can search the metadata for information they wish to order.

Client applications can access data holdings via order distribution or online access. Data Partners retain complete control over what metadata are represented in ECHO including inserting new metadata, modifying existing metadata and removing old metadata, and controlling access to their metadata.

Client applications can be developed to communicate with ECHO and provide user-friendly access to the ECHO system and allows users to manage their accounts, providers to manage their metadata, and administrators to manage ECHO users and providers. PUMP (Provider User Management Program), is one such application. PUMP is a web-based interface that provides an easy, screen-driven way for users to perform user management, provider, and administrative tasks. While all users benefit from this application for user management, the main focus is on the provider tasks—both Data and Service.

CHAPTER 2. ECHO ENTITIES

This section describes several high-level concepts that will help you understand the ECHO system. The following is a selected list of entities. For the complete list of ECHO entities, refer to the ECHO Data Model Entity List on the ECHO website at http://www.echo.nasa.gov/data_partners/ECHO3.shtml.

2.1 Users

There are two types of users in ECHO: guest and registered users. A registered user is a person who has registered with ECHO by providing basic contact information. Registered users can be given the provider role, which gives them privileges to act on behalf of a data provider to manage their metadata. The provider role can be given to a registered user by ECHO Administrators or by another registered user with the provider role.

Only registered users may use PUMP. However, by registering with ECHO, Guests become registered users and may subsequently use PUMP.

2.2 Roles

ECHO regulates access privileges based on the concept of user roles. User roles are a way to grant a user access to sensitive or protected parts the system. These roles facilitate greater flexibility with operation-level authorization and allow certain users the ability to have more than one role without having more than one account in the system.

2.2.1 Provider Role

As a Client Partner, your role is the **provider role**. You may have one or more provider roles, each of which is associated with one provider in the ECHO system.

Provider roles allow users to access and update information about the providers with which they are associated. For example, if a user has a provider role for Oak Ridge National Laboratory (ORNL), then that user can use the Provider Context operations to update the contact information for ORNL.

If a user has more than one provider role, the user must tell the system which provider they currently want to represent. This is the "provider context". The provider context indicates the current provider that you represent, and as the name implies, it is to this provider that the provider-oriented operations in the system are applied.

Note: If a user is associated with only one provider role, the system assumes the provider associated with that one provider role is specified in the user's "provider context."

2.2.2 Administrator Role

A user can only be associated with one instance of this role. This role allows the user to access and update information about any user and any provider. Essentially, this role should allow the user full access to almost anything in the system and available through the current PUMP. Users assigned this role should read the *ECHO 10.0 Operations Guide* as well as this document.

2.3 Groups

The term **groups** refers to an aggregating mechanism in ECHO that allows Client Partners to associate a Group name with a given set of users. When a group is created, the group's owner specifies an ECHO user to be the group's manager. However, group managers can be added and removed after creation by other group managers. After becoming a member of a group, a user can be granted access to restricted metadata.

2.4 Rules

Rules include conditions and provide a complete evaluation. Rules define which specific data is to be controlled, as well as the condition to use for evaluating whether the data should be controlled. Rules also contain a

comparator, which is a key part of rule evaluation. Lastly, rules contain data including **ActionType** (describes which actions the rule applies to), and in the case of a permission, a **GroupName** (describes which Group the permission applies to). **Restrictions** (one type of a rule) apply to the global ECHO population, and **permissions** (the other type of a rule) apply to a specific group.

ECHO provides a mechanism for controlling access to metadata via Rules. Data partners may restrict or permit users of the ECHO system to take action upon metadata. These actions currently include viewing, browsing, and ordering metadata. Data partners may create conditions that are used to specify characteristics of metadata. For example:

- 30 days old
- the month of September
- qaFlag2 value 3

When combined with a Comparator, Action, and Data Holding to create rules, conditions become powerful.

If a rule is a restriction, it applies to the entire ECHO populace. If a rule is a permission it applies only to members of the group specified.

In addition to the restrictions and permissions, a collection can be set to be restricted from viewing, browsing, and ordering by all users except the ones acting on behalf of the provider who owns the collection by simply setting its visibility flag to 'RESTRICT'. This restriction can be removed by simply change its visibility flag back to 'OPEN'. The restriction applied on the collection will also be applied on all its granules.

2.5 Orders

An **order** is a collection of **catalog** items that a client wishes to have and would like to order from a Data Provider. Each item in the order is associated with a quantity and any options available for that item. Within ECHO, a user creates an order and then adds, deletes, and updates each item in the order before submitting the order to ECHO.

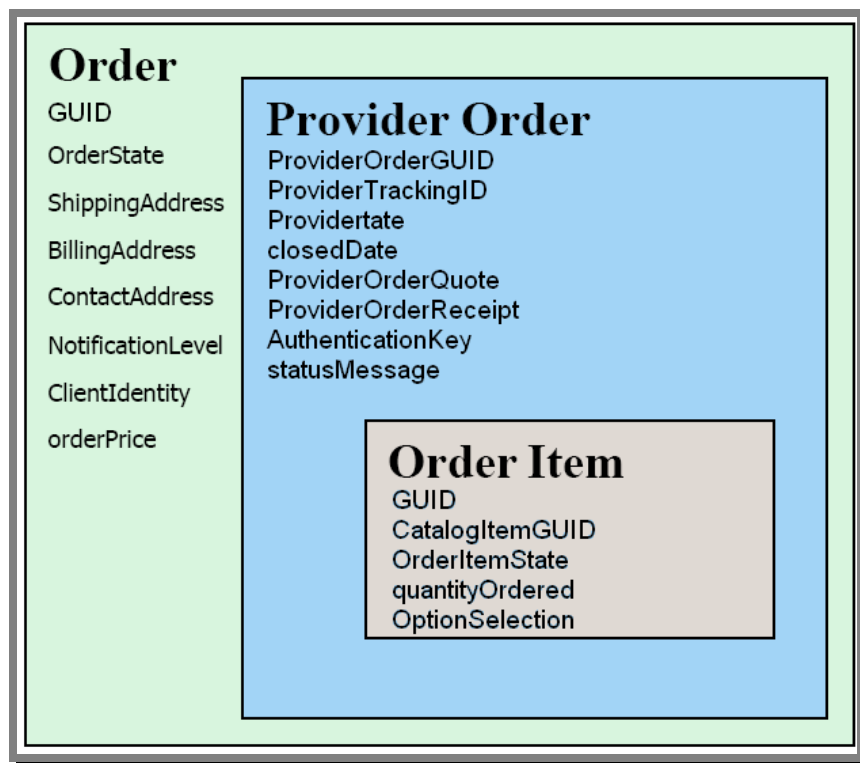


Figure 1: ECHO Order Structure

The **collection** of catalog items that comprises an order does not have to belong to one provider, but can span many providers. When organizing providers and catalog items within an order, another concept called a “provider order” is used. A provider order is a collection of all items in the original order that belong to a single provider. Since an order may contain orders from multiple providers, an order can consist of one or more provider orders. Each provider order can consist of one or more catalog items that belong to the same provider. To identify a specific provider order, you need the GUID of the order that includes that provider order and the GUID of the Data Partner associated with that provider order.

When a full order is submitted, ECHO splits the user’s order into separate provider orders and submits each provider order to the associated Data Provider.

2.6 Order Options

Data Partners generally use Provider User Management Program (PUMP) or the API itself to set up order options.

Use **order options** to describe the structure of the data to request of the client as well as how to display the order form to the client. **Option definitions** contain a name, scope, deprecated flag, and an ECHO Form. Every option definition for a provider has a unique name. The **scope** indicates whether it is a system-level option definition or provider-level option definition. The **deprecated flag** indicates that you, as a Data Partner, have made that option definition obsolete. The deprecated flag indicates to clients that they should no longer use the option definition. The form part of the option definition contains an ECHO Form.

As of ECHO 10.1 data providers are able to supply two additional option definition fields: description and sort key. The new fields are available in a new extended option definition type, OptionDefinition2. The description field allows data providers to supply users with a longer description of the type or purpose of an option definition and it is intended for client display. The sort key allows data providers to indicate display order of their option definitions to users and is intended to be used by clients to sort option definitions on display to users.

The **Option Selection** is the data from the client for a specific option definition. The selection should be put in the content part of the option selection. Options are also used in ECHO to describe authenticators and options for ordering data from a provider.

2.7 PUMP/User Function Mapping

- a. All registered users may manage their own user information and perform all of the tasks in the User Profile (section 3.4), User Preferences (section 3.5), and, if a manager for a group, Group Management (section 3.6)
- b. A registered user who is designated as a group manager can perform Group Management (section 3.6) tasks such as maintaining the group's description, name, and membership roster. A group manager can create groups if he/she also has the provider role.
- c. A registered user with the provider role can access and update information about the providers with which they are associated as well as all of the tasks listed above. Providers can perform all of the tasks described in Provider Context (section 3.7).
- d. A registered user with administrator role may access any of the above tasks plus perform User Management (section 3.8) tasks.

Table 1. PUMP Function-User Mapping

	Guest	User	Provider	Administrator
Register as an ECHO User	√			
Register as an ECHO Provider		√		
Update User Profile (self)		√	√	√
Update User Profile (others)				√*
Update User Preferences (self)		√	√	√
Update User Preferences (others)				√*
Group Management, Add/Delete Groups			√	√**
Group Management as Manager		√	√	√
Provider Context			√	√**
User Management				√

* Administrator may perform these tasks by "acting as" another user

** Administrator may perform these tasks by setting his provider context

CHAPTER 3. HOW TO USE PUMP

3.1 Getting In To PUMP

PUMP is located at the following URLs:

Operational System: <https://api.echo.nasa.gov/pump>

Partner Test: <https://api-test.echo.nasa.gov/pump>

Testbed: <https://testbed.echo.nasa.gov/pump>

To access PUMP, copy the URL desired into your preferred browser (Firefox and Internet Explorer are the recommended browsers).

3.2 PUMP User Interface

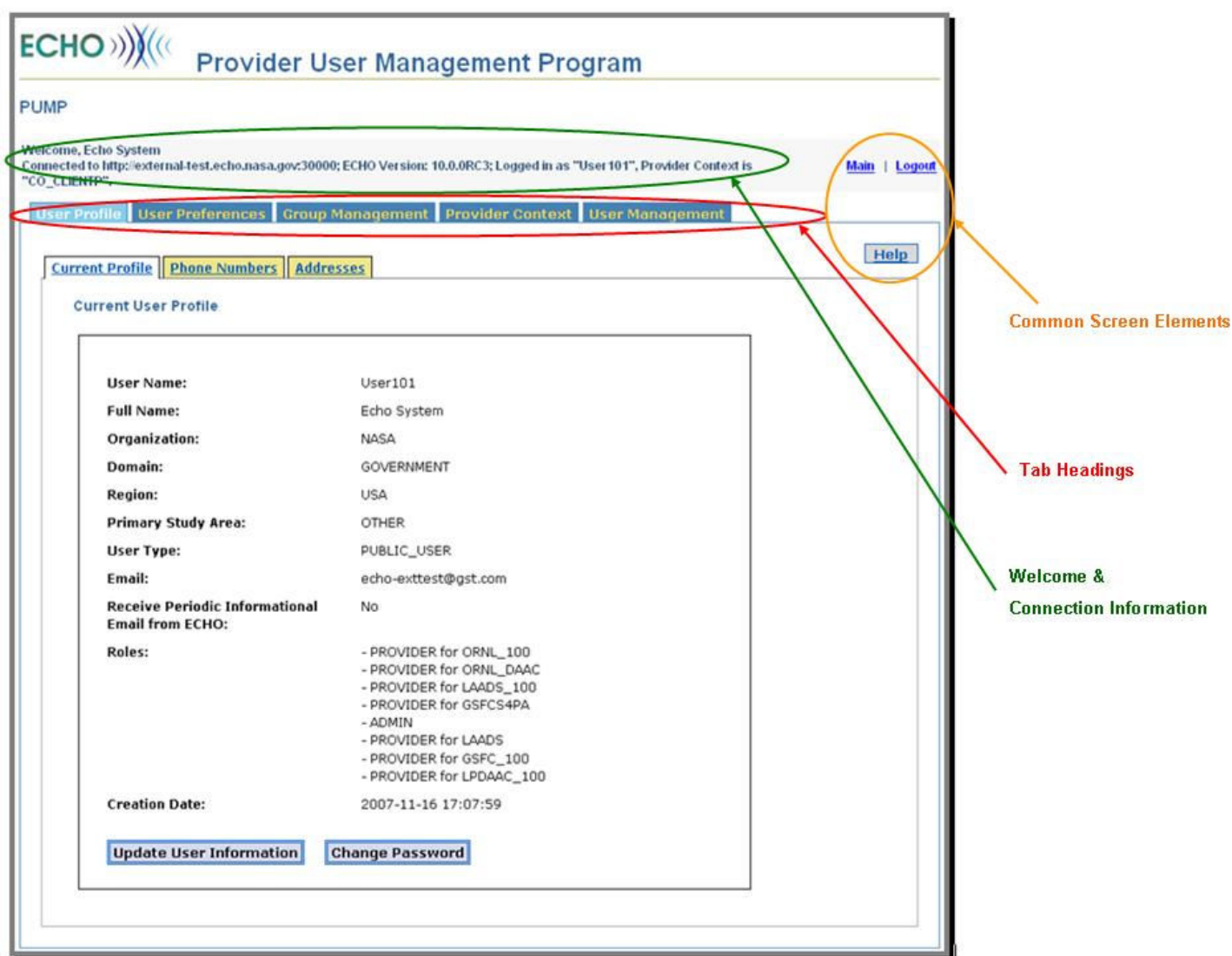


Figure 2. Sample PUMP Screen

3.2.1 PUMP Common Screen Elements

Figure 2 shows a sample PUMP screen. All PUMP screens include the following:

- a. "Welcome" and the full name of the user
- b. Connection Information, includes:
 - 1) URL connected to; in this case:
http://external-test.echo.nasa.gov:30000)
 - 2) Version of ECHO being used; in this case:
ECHO Version: 10.0.0RC3
 - 3) User Name you are logged in as; in this case:
Logged in as "User101"
- c. Tab Headings. The possible headings that will be displayed:
 - 1) User Profile
 - 2) User Preferences
 - 3) Group Management
 - 4) Provider Context (Providers & Administrators only)
 - 5) User Management (Administrators only)

Each tab will have sub-tabs beneath them that further break down the functions. More details on each tab and its associated sub-tabs are provided in the following sections.
- d. Common Screen Elements. These links/buttons are available from all PUMP screens.
 - 1) Main—returns the user to the User Profile tab. The last sub-tab (Current Profile/Phone Numbers/Addresses) the user was at in "User Profile" is displayed
 - 2) Logout—Logs out the user
 - 3) Help—Brings up online help screen for the elements on the current screen

3.2.2 Tabs/Functions

All pages/screens of the PUMP User Interface (UI) display the PUMP common screen elements (see section 3.2.1, PUMP Common Screen Elements and Figure 2). One of these elements is the Tab Headings.

The screenshot displays the ECHO Provider User Management Program interface. At the top, the ECHO logo and title 'Provider User Management Program' are visible. Below this, the 'PUMP' section includes a welcome message and system information. A navigation bar contains five tabs: 'User Profile', 'User Preferences', 'Group Management', 'Provider Context', and 'User Management'. The 'User Profile' tab is active, showing sub-tabs for 'Current Profile', 'Phone Numbers', and 'Addresses'. The 'Current Profile' sub-tab displays a form with the following fields and values:

User Name:	User101
Full Name:	Echo System
Organization:	NASA
Domain:	GOVERNMENT
Region:	USA
Primary Study Area:	OTHER
User Type:	PUBLIC_USER
Email:	echo-exttest@gst.com
Receive Periodic Informational Email from ECHO:	No
Roles:	- PROVIDER for ORNL_100 - PROVIDER for ORNL_DAAAC - PROVIDER for LAADS_100 - PROVIDER for GSFC4PA - ADMIN - PROVIDER for LAADS - PROVIDER for GSFC_100 - PROVIDER for LPDAAC_100
Creation Date:	2007-11-16 17:07:59

At the bottom of the form are two buttons: 'Update User Information' and 'Change Password'. Red arrows originate from various fields and point to external references on the right side of the image:

- From 'User Name' to 'See Section 3.8'
- From 'Full Name' to 'See Section 3.7'
- From 'Email' to 'See Section 3.6'
- From 'Roles' to 'See Section 3.5'
- From 'Creation Date' to 'See Section 3.4'

Figure 3. PUMP Tab Function Headings

PUMP functionality is grouped in up to five tabs (three for general registered users, four for providers, and five for administrators) that allow users to maintain (add/delete/modify) the associated information within each tab. (See Figure 3) These tabs/functions include:

- a. User Profile (covered in section 3.4)

The User Profile contains personal user information specific to the user who owns the currently logged in User Name

- 1) Update User Information
- 2) Change Password
- 3) Add/Delete/Update Phone Numbers

- 4) Add/Delete/Update Addresses
- b. User Preferences (covered in section 3.5)
The User Preferences contains information to be used by ECHO when processing your queries, orders, subscriptions, etc.
 - 1) Update Order Notification Level
 - 2) Add/Delete/Update Custom Properties XML
 - 3) Add/Delete/Update Contacts
 - 4) Clear all preferences
- c. Group Management (covered in section 3.6)
 - 1) View Groups
 - 2) Create/Delete/Update Groups
 - 3) Add/Delete Managers
 - 4) Add/Delete Members
 - 5) Email Managers and/or Members
- d. Provider Context (Providers and Administrators only) (covered in section 3.7)
 - 1) Set/Leave Provider Context
 - 2) Update Provider Information
 - 3) Grant/Revoke Provider Role
 - 4) Add/Delete/Update Provider Contacts
 - 5) Update/Clear Provider Policies
 - 6) View Provider Orders
 - 7) Data Management
 - a) View/Add/Delete Rules
 - b) Update Visibility
 - c) Rules Search/Report
 - d) View/Add/Delete/Deprecate Option Definitions
 - e) View/Add/Delete Option Assignments
 - 8) User Lookup (user name/user information)
- e. User Management (Administrators only) (covered in section 3.8)
 - 1) Set/Leave User Context
 - 2) Grant/Revoke Administrator Privileges
 - 3) Delete User
 - 4) Reset Another User's Password
 - 5) User Lookup (any User in ECHO)
 - 6) Activate Provider
 - 7) Activate SSL Certificate
 - 8) Generate a Group Report

3.3 Welcome/Home Screen

The first screen (Figure 4) you will see is the welcome screen that asks you to login or register with ECHO. Since data providers use PUMP to manage their metadata in ECHO, login to ECHO is necessary to safeguard the metadata integrity. PUMP uses ECHO registration information to authenticate a user. This screen is also where the "Home" link on the Login screen (Figure 5) takes you.

The Welcome screen asks you to click one of the three links:

a. Login as existing user, recall user name, or reset password here.

Since data providers use PUMP to manage their metadata in ECHO, login to ECHO is necessary to safeguard the metadata integrity. PUMP uses ECHO registration information to authenticate a user.

This link has three possible uses:

- 1) Log in: If you are already a registered user and have a User Name and password and remember them
- 2) Recall User Name: If you are already a registered user and have a User Name and password but cannot remember your User Name. You will need to provide the email address associated with the User Name.
- 3) Reset Password: If you don't remember your password or if you want to reset it for any reason. You will need to provide your user name (userid) and the email address associated with the User Name.

b. Register as ECHO user

- 1) Become a registered user with this link.
- 2) You will be asked to provide account and user information

c. Register as data provider

- 1) Existing user may register as a provider user. *Note that this link applies to both Data and Service Providers*
- 2) You must already be a registered user to register as a provider

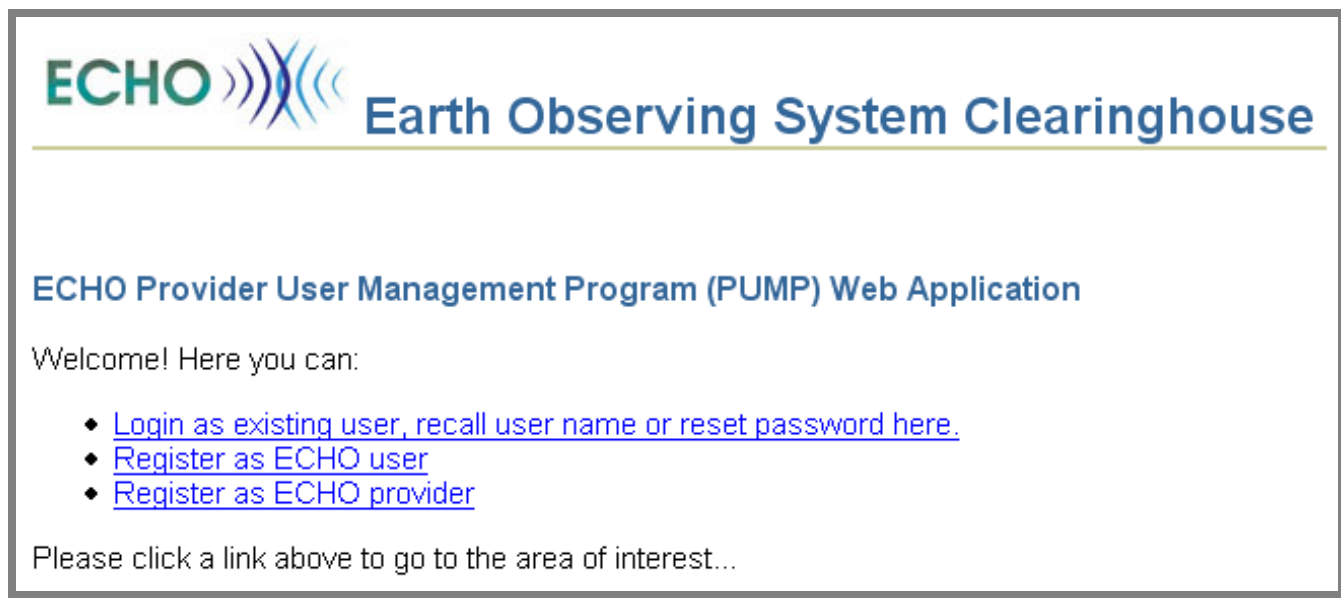


Figure 4. PUMP Welcome/Home Screen

3.3.1 Login/Recall User Name/Reset Password Screen

The ECHO PUMP login screen (Figure 5) will appear when you:

- Click on the "Login as existing user, recall user name, or reset password here." link from the welcome page, OR
- If your session times out

The screenshot shows the ECHO PUMP login interface. At the top, the ECHO logo and 'Earth Observing System Clearinghouse' are displayed. Below this, the title 'Provider User Management Program (PUMP) Login' is shown, followed by the instruction 'Please enter your ECHO user credentials in order to proceed.' The main form area contains two input fields: '* Enter Your User Name:' and '* Enter Your Password:', both marked as required. Below the password field is a '(Required Field)' label. There are 'Login' and 'Cancel' buttons. At the bottom of the form are two links: 'Can't remember your username?' and 'Need to reset your password?'. A 'Home' link is in the top right corner. Red arrows point from labels 3.3.1.1, 3.3.1.2, 3.3.1.3, and 3.3.1.1, d to specific elements on the screen.

Figure 5. Login/Recall User Name/Reset Password Screen

3.3.1.1 Login

a. Enter your User Name

- 1) Enter the User Name you specified when you registered with ECHO or PUMP
- 2) If you have forgotten your User Name, click the "Can't remember your username?" link

b. Enter Your Password

- 1) Enter the password associated with the specified User Name
- 2) If you have forgotten your password or you want to reset it, click the "Need to reset your password?" link

c. After entering your User Name and password, click one of the following:

- 1) Login: To proceed with logging in to PUMP
- 2) Cancel: To abort logging in to PUMP

d. If you wish to return to the PUMP Welcome screen, click the "Home" link in the upper right corner.

Note: You can exit a transaction at any time by clicking the "Cancel" button from any screen and no changes will be saved.

Once logged in, you may begin using PUMP. The functions available to you depend on your roles and permissions (see section 2.7, PUMP/User Function Mapping and section 3.2.2, Tabs/Functions).

If an invalid User Name is entered, the following error message (Figure 6) appears:

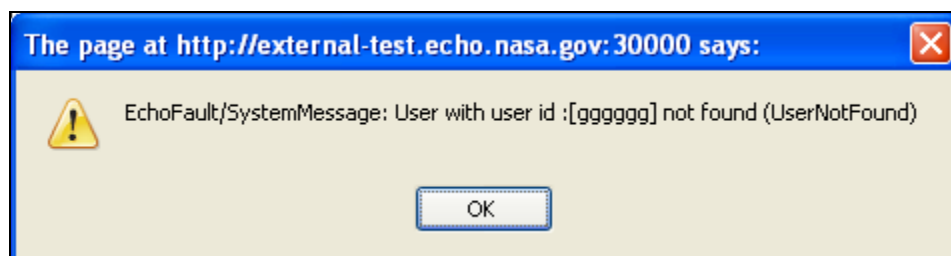


Figure 6. Error Message for Invalid User Name/User ID

If an invalid password is entered, the following error message (Figure 7) appears:

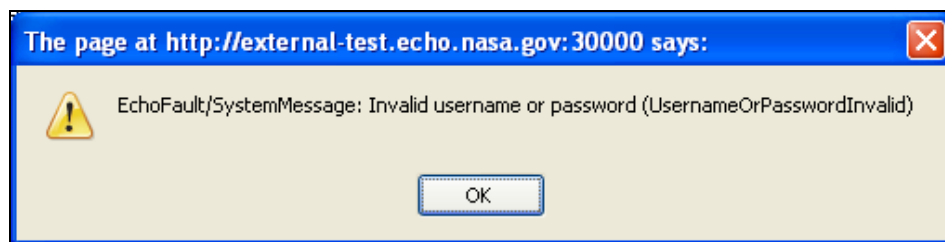


Figure 7. Error Message for Invalid Password

A web page for the "ECHO Earth Observing System Clearinghouse". The page title is "Provider User Management Program (PUMP) Login". Below the title, a yellow banner reads "Your Session Has Timed Out. Please sign in again". Underneath, it says "Please enter your ECHO user credentials in order to proceed." There is a login form with two input fields: "* Enter Your User Name:" and "* Enter Your Password:". A blue link "Please Enter your user name" is next to the first field. Below the password field is the text "* (Required Field)". At the bottom of the form are two buttons: "Login" and "Cancel".

Figure 8. Session Time Out

3.3.1.2 Recall User Name

The screenshot shows a web form titled "Use this form for placing a request to retrieve your ECHO User Name." It contains a label "* Email Address:" followed by a text input field. Below the input field are two buttons: "Recall Username" and "Cancel". Red arrows point from text labels to specific elements: "3.3.1.2, b." points to the input field, "3.3.1.2, c." points to the "Recall Username" button, and "3.3.1.2, d." points to the "Cancel" button.

Figure 9. Recall User Name Screen

If you have forgotten your User Name:

- a. Click on: **Can't remember your username?** (see Figure 5)
A box labeled "Email Address" will appear (see Figure 9)
- b. In the Email Address box, enter the email address associated with the User Name you are attempting to retrieve.
- c. Click the "Recall Username" button to continue (see Figure 10 & Figure 11 for results)
- d. At any time, if you wish to cancel the recall request, click the "Cancel" button

Note that if you enter an invalid email address, PUMP will not tell you (nor will you receive your username). This is a security safeguard to prevent unauthorized persons from knowing whether they have found a valid email address and whether it's associated with a registered user's User Name.

If you do not receive a password email and think that you should have, contact ECHO Operations (echo@echo.nasa.gov) to verify what email address is associated with the account.

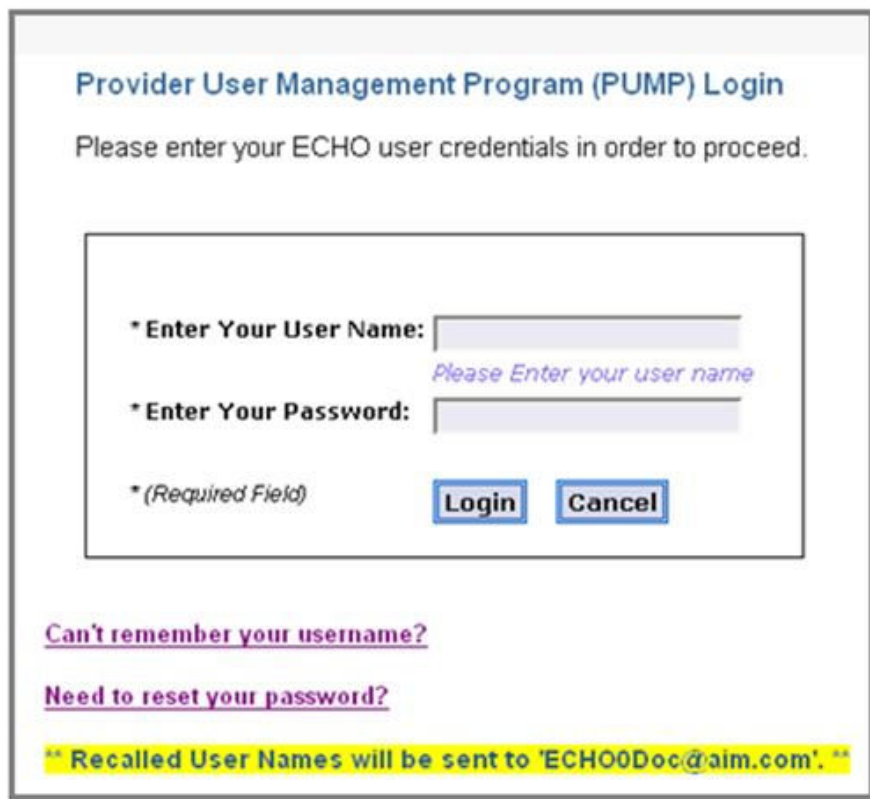


Figure 10. Recall Username Response



Figure 11. Recall Username Email

3.3.1.3 Reset Password

The screenshot shows a web form titled 'Use this form for placing a request to reset your ECHO password.' It contains two text input fields: '* User Name:' and '* Email Address:'. Below these fields are two buttons: 'Reset Password' and 'Cancel'. Red arrows point from labels to specific parts of the form: '3.3.1.3, b.' points to the User Name field, '3.3.1.3, c.' points to the Email Address field, '3.3.1.3, d.' points to the 'Reset Password' button, and '3.3.1.3, e.' points to the 'Cancel' button.

Figure 12. Reset Password

If you have forgotten your password or you want to reset it:

- Click on: **Need to reset your password?** (see Figure 5)
Two boxes, one labeled "User Name" and the other labeled "Email Address," will appear (see Figure 12)
- In the User Name box, enter the User Name you are resetting the password for
- In the Email Address box, enter the email address associated with that User Name.
- Click the "Reset Password" button to continue
- At any time, if you wish to cancel the reset, click the "Cancel" button
- Your password will be reset to a randomly generated string and an email will be sent to the specified email with the new password (see Figure 13 and Figure 14 for results)

Note that if you enter an invalid email address or User Name, PUMP will not tell you. Additionally, if you enter a valid User Name but an invalid email address, PUMP will appear to send the email but will not and your password will not be reset. This is a security safeguard to prevent unknown/unauthorized users from attempting to find a way into the sensitive portions of the ECHO system.

If you do not receive a password email and think that you should have, contact ECHO Operations (echo@echo.nasa.gov) to verify what email address is associated with the account.

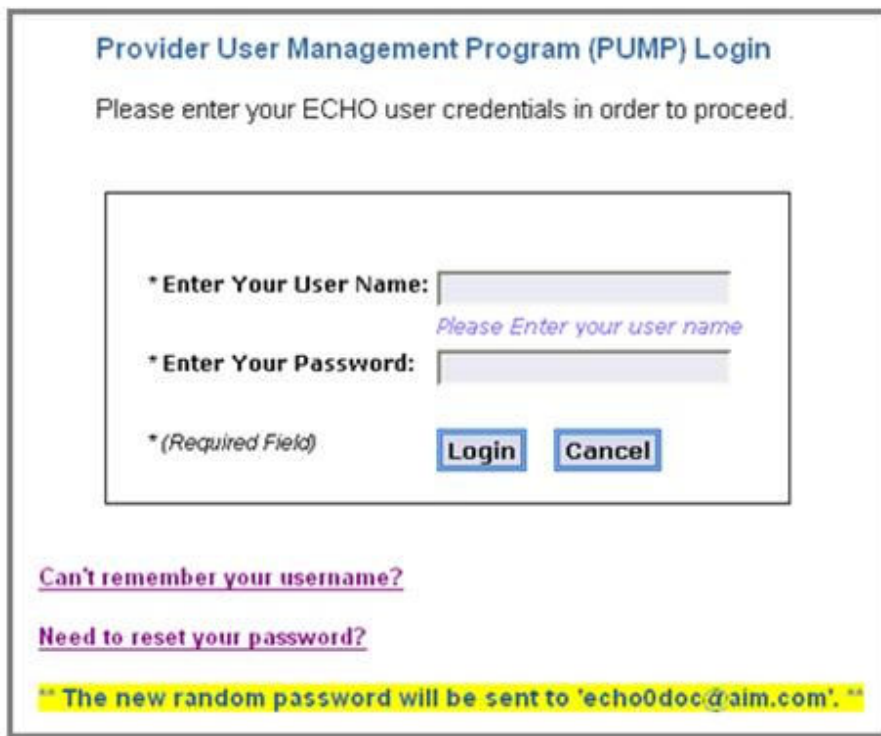


Figure 13. Reset Password Response

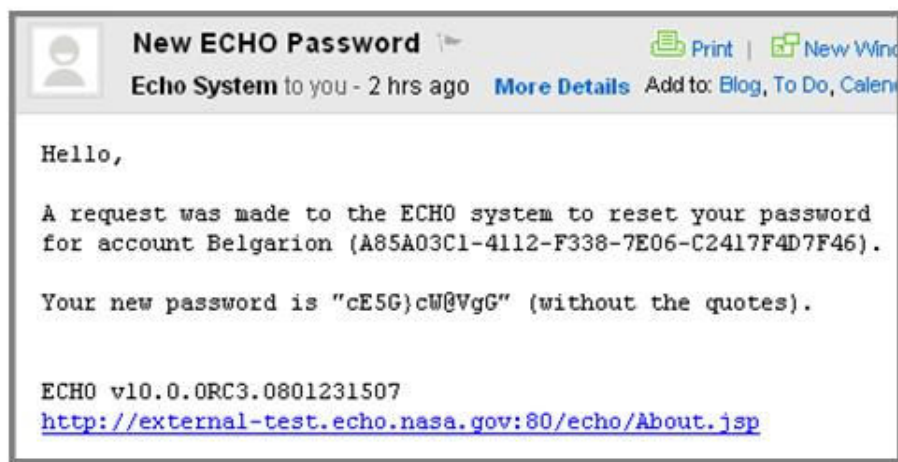


Figure 14. Reset Password Email

3.3.2 Register As ECHO User

Unlike the ECHO API, to use PUMP you must be a registered user. This screen (Figure 16) will appear when you choose to register with ECHO.

On the "Welcome" screen (see Figure 4), click on "Register as ECHO User" button

The screenshot shows the 'User Registration' form with the following fields and annotations:

- Account Information** (circled in red, labeled 3.3.2, a):
 - *User Name:
 - *Password:
 - *Confirm Password:
- User Information** (circled in red, labeled 3.3.2, b):
 - Title:
 - *First Name:
 - Middle Initial:
 - *Last Name: (labeled 3.3.2, b.1)
 - Receive Periodic Informational Email from ECHO: ☐
 - *Email Address:
 - *Organization:
 - *User Domain: (dropdown menu showing 'GOVERNMENT')
 - *User Region: (dropdown menu showing 'USA')
 - *Primary Study Area: (dropdown menu showing 'Air-Sea Interaction')
 - *User Type: (dropdown menu showing 'Production User')
- Phone Number** (circled in red, labeled 3.3.2, b.2):
 - *Phone Type: (dropdown menu showing 'BUSINESS')
 - *Phone Number:

Figure 15. Register as an ECHO User Screen Account Information, Personal, Phones

The following information is requested when registering. Fields marked with an asterisk (*) are required. Items marked with a † are required IF the address is a US-formatted address. See Appendix B, Data Entities for details on these fields.

a. Account Information

1) User Name*

2) Password*

a) The *password* length must be between 10 to 40 characters long.

b) In accordance with NASA policies, the *password* format must consist of at least three of the following character types:

- (1) upper case character (A – Z)
- (2) lower case character (a – z)
- (3) digit (0 – 9)
- (4) special character

3) Confirm Password*

b. User Information

1) Personal Information

- a) Title (*New field with ECHO 10*)
- b) First Name*
- c) Middle Initial (*New field with ECHO 10*)
- d) Last Name*
- e) Do you wish to receive periodic informational emails form ECHO? (check the box for "Yes")
- f) Email Address*
- g) Organization*
- h) User Domain*
- i) User Region*
- j) Primary Study Area*
- k) User Type*

2) Phone Number

- a) Phone Type*
 - (1) If Custom is picked, a box appears labeled "Custom Type Name" and is required
- b) Phone Number*

Mailing Address

* Address Name: (work, home, etc.)

US Format: ☐

* Street1:

Street2:

Street3:

Street4:

Street5:

* City:

State:

Zip/Postal code:

* Country: Abu Dhabi

Special Instructions

*(Required Field)

Register Cancel

3.3.2, c 3.3.2, d

3.3.2, b.3)

Figure 16. Register as an ECHO User Screen Mailing Address

The screenshot shows a registration form with the following fields:

- *City: [text input]
- State: [text input]
- Zip/Postal code: [text input]
- *Country: [dropdown menu with 'OTHER' selected]
- Enter custom country name. [text input]
- Special Instructions [text area]

A red arrow points from the text '3.3.2, b.3) g) (1)' to the 'Country' dropdown menu.

Figure 17. Register as an ECHO User Screen Custom Country Name

3) Mailing Address

- a) US Address Format* (check the box of "Yes")
- b) Address Name*
- c) Street1*, Street2, Street3, Street4, Street5
- d) City*
- e) State†
- f) Zip/Postal Code†
- g) Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

(1) If OTHER is selected, a "Custom Country Name" field appears and is required

- h) Special Instructions

Once you have entered the requested information:

- c. To complete your registration, click the "Register" button. (See Figure 18)

Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Register" button again. Your registration will not be complete until all entered data passes data validation. (See Figure 19)

- d. At any time, if you wish to cancel your registration, click the "Cancel" button.

Note: ECHO requires passwords to be at least 10 characters long and incorporate at least 3 out of 4 character types, such as lower case, upper case, numerical value and special characters. In addition, special characters ("&" "<", ">", etc.) are not accepted in the registration text.

Provider User Management Program (PUMP) Login

Congratulations! You have successfully created User --Sparhawk!!

Please enter your ECHO user credentials in order to proceed.

* Enter Your User Name:

Please Enter your user name

* Enter Your Password:

* (Required Field)

[Can't remember your username?](#)

[Need to reset your password?](#)

Figure 18. Register as an ECHO User Screen Response

Middle Initial:

*Last Name: *Validation Error: Value is required.*

Receive Periodic Informational Email from ECHO: ☐

*Email Address: *Validation Error: Value is required.*

*Organization: *Validation Error: Value is required.*

*User Domain:

Figure 19. Register as an ECHO User Screen Data Validation Error

3.3.3 Register As Provider

This action allows you to register as a provider (data or service). A data provider is a provider who will be adding data to the ECHO repository while a service provider is a provider who will be providing web services such as interfaces, implementations, advertisements, or GUIs to access the data in the ECHO repository,.

The user requesting the registration will automatically be given the provider role. Because ECHO operations must approve all new providers, a temporary ID will be returned. ECHO operations will review the provider and activate it in an appropriate timeframe. The registering user will receive an email when the provider is activated.

To register as a provider, you must first be a registered user of ECHO.

- a. From the PUMP Welcome/Home Screen (Figure 4), click on the "Register as a Provider" link. The "ECHO Provider Registration" screen (Figure 20) appears.



Figure 20. Register as a Provider

- b. Log into PUMP by entering your User Name and password and clicking the "Login" button (see Figure 20)
- c. The "Provider Registration screen" (Figure 21) appears asking for information about your provider organization.

The screenshot shows the 'Provider Registration' form. A red box highlights the top section containing fields for Organization Name, Provider Types (with a dropdown menu showing 'DATA' and 'SERVICE'), Discovery URLs, Description of Holdings, Description of Services, and Additional Information. Red arrows point from text labels on the right to specific fields: '3.3.3 d. 1) - 6)' points to the Description of Holdings field; '3.3.3 d.7)' points to the Contact Information section header; '3.3.3 d.8)' points to the Phone Number field. The Contact Information section includes fields for Title, First Name, Middle Initial, Last Name, Role, Email, and Phone Number. The Phone Number section includes a dropdown for Phone Type (set to 'BUSINESS') and a field for the Phone Number.

Figure 21. Provider Registration Screen General, Contact, and Phone

- d. In the following descriptions, fields marked with an asterisk (*) are required. Items marked with a † are required IF the address is a US-formatted address. See Appendix B, Data Entities for details on these fields
- 1) Organization*
 - 2) Provider Type*
 - 3) Discovery URLs*—identifies a provider web site
 - 4) Description of Holdings*—description of the type of data holdings the provider maintains
 - 5) Description of Services
 - 6) Additional Information
 - 7) Contact Information
 - a) Title (*New field with ECHO 10*)
 - b) First Name*
 - c) Middle Initial (*New field with ECHO 10*)
 - d) Last Name*
 - e) Role*—user's role in the provider's organization
 - f) Email Address*
 - 8) Phone Number
 - a) Phone Type*
 - (1) If Custom is picked, a box appears labeled "Custom Type Name" and becomes required
 - b) Phone Number*

* (Required Field)

Register Cancel

3.3.3 e. 3.3.3 f. 3.3.3 d.9)

Figure 22. Register as Provider Mailing Address & Buttons

9) Mailing Address

- a) Address Name*
- b) US Address Format* (check the box of "Yes")
- c) Street1*, Street2, Street3, Street4, Street5
- d) City*
- e) State†
- f) Zip/Postal Code†
- g) Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

(1) If OTHER is selected, a "Custom Country Name" field appears (see Figure 17) and is required

- h) Special Instructions

Once you have entered the requested information:

- e. To complete your registration, click the "Register" button.

Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Register" button again. Your registration will not be complete until all entered data passes data validation.

- f. At any time, if you wish to cancel your registration, click the "Cancel" button.

The screenshot shows a web form titled "Provider Registration". It contains four main sections, each with a validation error message in red text below it:

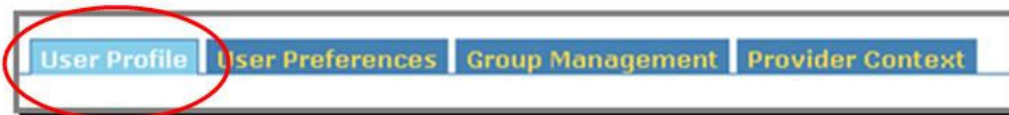
- * Organization Name:** A text input field with the error "Validation Error: Value is required."
- * Provider Types:** A dropdown menu showing "DATA" and "SERVICE" options, with the error "Validation Error: Value is required."
- * Discovery URLs: (separate multiple entries with ";")** A text input field containing "www.pandions.com".
- * Description of Holdings:** A large text area with the error "Validation Error: Value is required."

Figure 23. Register as Provider Data Validation Errors

The screenshot shows the PUMP Welcome screen. At the top, it says "PUMP". Below that, it says "Welcome, Edwin Sparhawk" and "Connected to http://external-test.echo.nasa.gov:30000; ECHO Version: 10.0.0RC3; Logged in as 'Sparhawk'". There are links for "Main" and "Log Out". The main message is "You have successfully registered as provider .". Below that, it says "Your temporary provider ID is D65FD221-2312-0B5B-0BFC-F92DF514CBA1. Please keep or print it out for your record. ECHO operations will review your provider registration and activate it in an appropriate timeframe. You will receive email when this provider is activated."

Figure 24. Register as Provider Response

3.4 User Profile



The User Profile information contains the personal information specific to the user who owns the currently logged in User Name. This information includes the user's Profile, Phone Numbers, and Addresses. From this tab, a user may modify his or her personal information, add additional information, or delete old information. The User Profile information is broken up into three sections or sub-tabs: Current Profile, Phone Numbers, and Addresses.

Note that when you log in you are initially placed in the User Profile tab. Which sub-tab (Current Profile, Phone Numbers, Addresses) you are placed in depends on the last sub-tab you were in when you last accessed the User Profile tab. You see the applicable information in a read-only form.

The following is the information included in this tab. For details, see section 3.4.1.1, Updating User Information.

- a. Profile—Contains personal information such as User Name/User ID, Full Name, Organization, etc.
- b. Phone Number(s)
- c. User Address(es)

3.4.1 Modifying Current Profile



Current User Profile	
User Name:	Belgarion
Full Name:	HMS Belgarion Riva
Organization:	Isle of the Winds
Domain:	GOVERNMENT
Region:	INTERNATIONAL
Primary Study Area:	BIOLOGICAL_OCEANOGRAPHY
User Type:	PRODUCTION_USER
Email:	ECHO0Doc@aim.com
Receive Periodic Informational Email from ECHO:	No
Roles:	- PROVIDER for LPDAAC_TBD
Creation Date:	2008-03-13 19:13:46
<div> <div>Update User Information</div> <div>Change Password</div> </div>	

3.4.1.1

3.4.1.2

Figure 25. Current Profile Tab

3.4.1.1 Updating User Information

- a. To modify the user information associated with this User Name, click the "Update User Information" button (see Figure 25).

The "Update User Profile" screen appears (see Figure 26).

Update User Profile

User Name: Belgarion

Title: CUSTOM HMS
Input own title. Note that 'CUSTOM' will not be part of the title.

* First Name: Belgarion

Middle Initial:

* Last Name: Riva

Receive Periodic Informational Email from ECHO: ☐

* Email Address: ECHO0Doc@aim.com

* Organization: Isle of the Winds

* User Domain: GOVERNMENT

* User Region: INTERNATIONAL

* Primary Study Area: BIOLOGICAL_OCEANOGRAPHY

* User Type: Production User

Creation Date: 2008-03-13 19:13:46
*(Required Field)

Update **Cancel**

3.4.1.1 b. (points to Title field)

3.4.1.1 c. (points to Update button)

3.4.1.1 d. (points to Cancel button)

Set by ECHO, not modifiable (points to Creation Date field)

Figure 26. Update User Profile

- b. You may now modify any of the modifiable fields. Note that if a field is required (*) you may modify it but you may not delete it. See Appendix B, Data Entities for details on these fields.
 - 1) Title (*New field with ECHO 10*)
 - 2) First Name*
 - 3) Middle Initial (*New field with ECHO 10*)
 - 4) Last Name*
 - 5) Do you wish to receive periodic informational emails form ECHO? (check the box for "Yes")
 - 6) Email Address*
 - 7) Organization*
 - 8) User Domain*
 - 9) User Region*
 - 10) Primary Study Area*
 - 11) User Type*
- c. When done, click the "Update" button to perform the actual update.
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Update" button again. The update will not be complete until all entered data passes data validation.
- e. At any time, if you do not wish to update the profile, click the "Cancel" button.

3.4.1.2 Changing Password

- a. To change the password associated with this User Name, click the "Change Password" button (see Figure 25).

The "Change Password" screen appears (see Figure 27).

The screenshot shows a web form titled "Change Password". Below the title is a paragraph of instructions: "Set the account password to a new value. The length of *password* must be between 10 to 40 characters long. In accordance with NASA policies, the format of *password* must consist of a least three of the following character types: upper case character, lower case character, digit and special character." Below this text are three input fields labeled "*Old Password:", "*New Password:", and "*Confirm New Password:". Each field contains a series of dots representing masked text. Below the fields is a note "* (Required Field)". At the bottom of the form are two buttons: "Change Password" and "Cancel". Red arrows point from the following labels to the form elements: "3.4.1.2 c." points to the "Old Password" field, "3.4.1.2 d." points to the "New Password" field, "3.4.1.2 e." points to the "Confirm New Password" field, "3.4.1.2 f." points to the "Change Password" button, and "3.4.1.2 b. (Cancel)" points to the "Cancel" button.

Figure 27. Change Password

- b. If at any time prior to clicking the "Change Password" button you decide not to change your password, click the "Cancel" button to cancel the password change.
- c. Enter your current password in the "Old Password" box
- d. Enter the new password in the "New Password" box. New password must conform to the following:
 - 1) The *password* length must be between 10 to 40 characters long.
 - 2) In accordance with NASA policies, the *password* format must consist of at least three of the following character types:
 - a) upper case character (A – Z)
 - b) lower case character (a – z)
 - c) digit (0 – 9)
 - d) special character
- e. Re-enter the new password in the "Confirm New Password" box
- f. Click the "Change Password" button to change your password

The screenshot shows a web application interface with three tabs at the top: 'Current Profile', 'Phone Numbers', and 'Addresses'. The 'Current Profile' tab is active. Below the tabs, the title 'Current User Profile' is displayed. A yellow message box at the top of the profile area reads '** Change Password Successful! **'. Below this, a list of user information is shown in a two-column format:

User Name:	Belgarion
Full Name:	HMS Belgarion Riva
Organization:	Isle of the Winds
Domain:	GOVERNMENT
Region:	INTERNATIONAL
Primary Study Area:	BIOLOGICAL_OCEANOGRAPHY
User Type:	PRODUCTION_USER
Email:	ECHODoc@aim.com
Receive Periodic Informational Email from ECHO:	No
Roles:	- PROVIDER for LPDAAC_TBD
Creation Date:	2008-03-13 19:13:46

At the bottom of the profile area, there are two buttons: 'Update User Information' and 'Change Password'.

Figure 28. Password Change Successful

- g. Data validation will take place against the old and new password you entered. If there is an error, an error message will be displayed.
- 1) An error is generated if you entered an incorrect "old" (current) password.

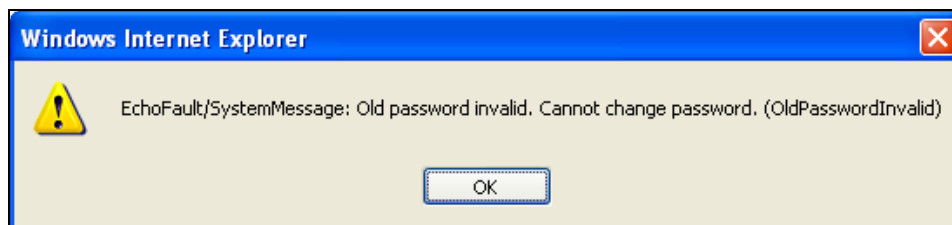


Figure 29. Invalid Current Password entered

- 2) If the new password does not conform to the rules or the "New Password" does not match the "Confirm New Password", an error is generated



Figure 30. Password does not conform to rules

Change Password

Set the account password to a new value. The length of *password* must be between 10 to 40 characters long. In accordance with NASA policies, the format of *password* must consist of a least three of the following character types: upper case character, lower case character, digit and special character.

Password

*Old Password:

*New Password: Validation Error: Value is less than allowable minimum of '10'

*Confirm New Password: New Passwords do not match!

* (Required Field)

Data validation errors

Figure 31. Data Validation Errors

- 3) Correct the password in error (Old, New, and/or Confirm New) and click the "Change Password" button again. Your password will not be changed until all the passwords passes data validation.

3.4.2 Modifying Phone Numbers

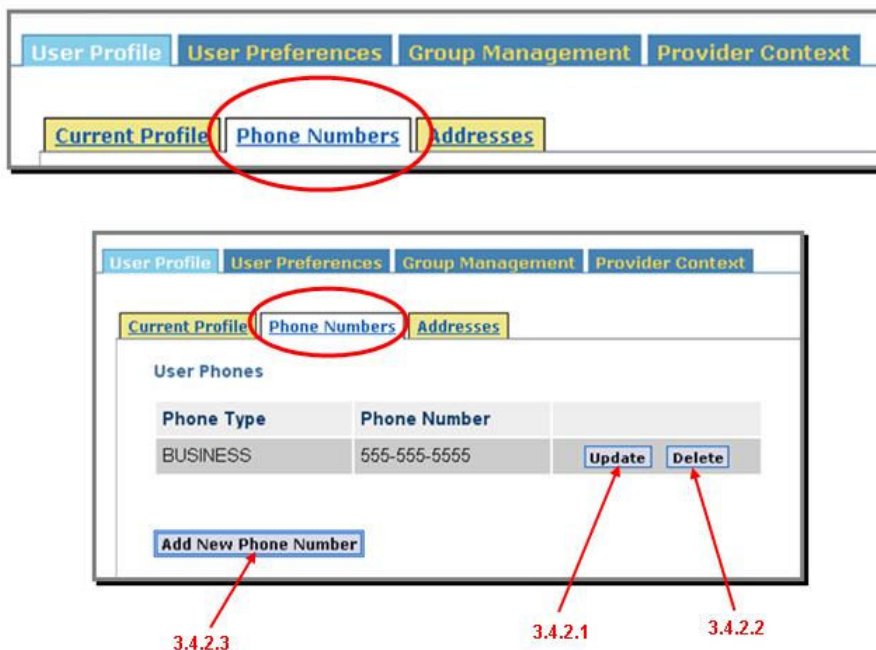


Figure 32. User Profile Phone Numbers Tab

3.4.2.1 Modify Existing Phone Number

- a. To modify the phone information associated with this User Name, click the "Update" button next to the phone number you wish to modify (see Figure 32).

The "Update User Phone" screen appears (see Figure 33).

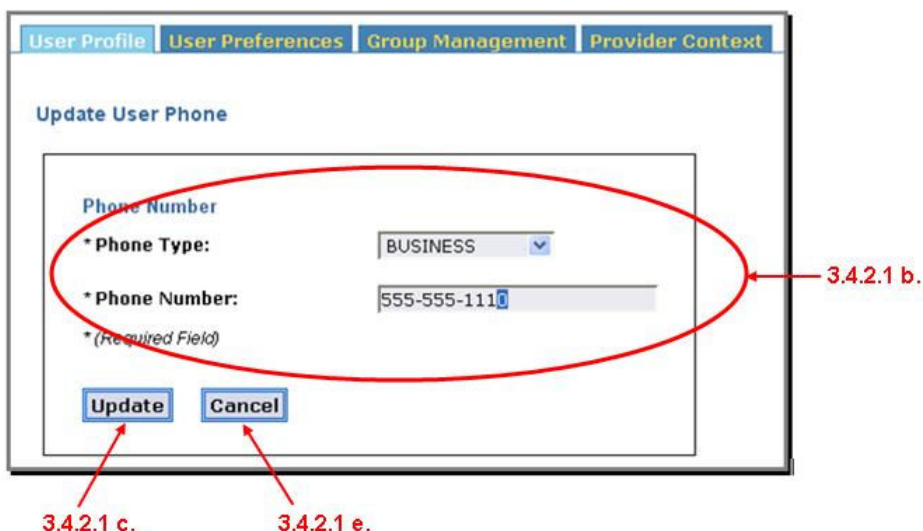


Figure 33. Update User Phone Screen

- b. You may now modify any of the fields. Note that if a field is required you may modify it but you may not delete it. See Appendix B, Data Entities for details on these fields.

- 1) Phone Type*

- a) If Custom is picked, a box appears labeled "Custom Type Name" and is required

2) Phone Number*

- c. Click the "Update" button to update the phone number
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Update" button again. The update will not be complete until all entered data passes data validation.

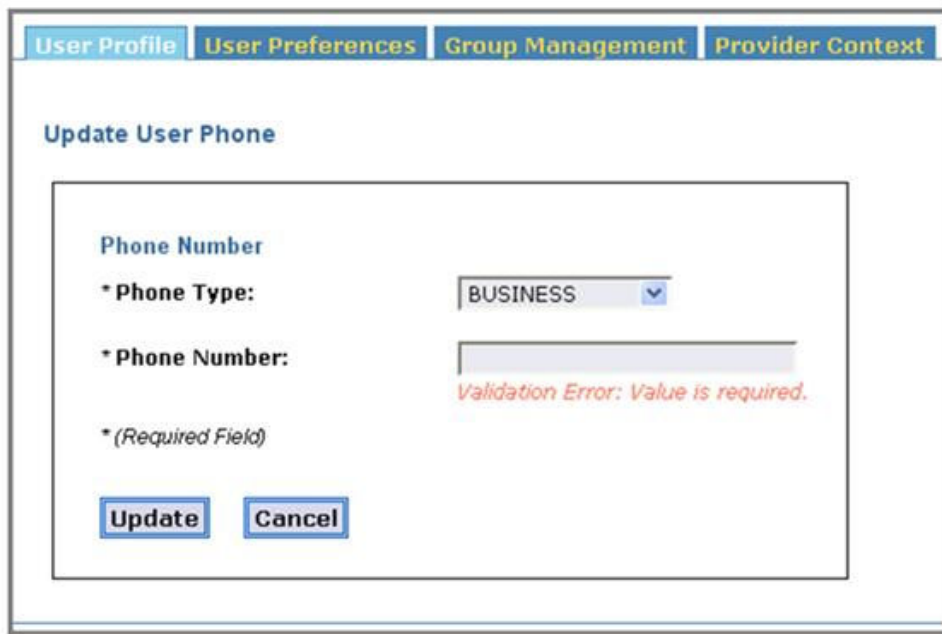


Figure 34. Update Phone Number Data Validation Error

- e. At any time, if you do not wish to update the phone number, click the "Cancel" button.

3.4.2.2 Delete an Existing Phone Number

- a. To delete the phone information associated with this User Name, click the "Delete" button next to the phone number you wish to delete (see Figure 32).

A confirmation dialog box will appear.

- b. If you wish to continue the phone deletion, click the "OK" button (see Figure 35)
- c. If you do not wish to continue with the deletion, click the "Cancel" button (see Figure 35)

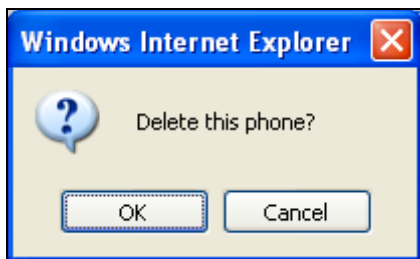


Figure 35. Delete Phone Confirmation Dialog

3.4.2.3 Add A New Phone Number

- a. To add a new phone, click the "Add New Phone Number" button (see Figure 32).
The "Add User Phone" screen will appear (see Figure 36).

User Profile | User Preferences | Group Management | Provider Context

Add User Phone

Phone Number

* Phone Type: BUSINESS_FAX

* Phone Number: 555-555-1112

*(Required Field)

Add Cancel

3.4.2.3 b.

3.4.2.3 c.

3.4.2.3 e.

Figure 36. Add User Phone Screen

- b. You may now enter the requested information for the new phone number. See Appendix B, Data Entities for details on these fields.
 - 1) Phone Type*
 - a) If Custom is picked, a box appears labeled "Custom Type Name" and is required
 - 2) Phone Number*
- c. Click the "Add" button to add the phone number
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation. The following fields are required: (See Figure 34 for sample)
- e. At any time, if you do not wish to add the phone number, click the "Cancel" button.

3.4.3 Modifying Addresses

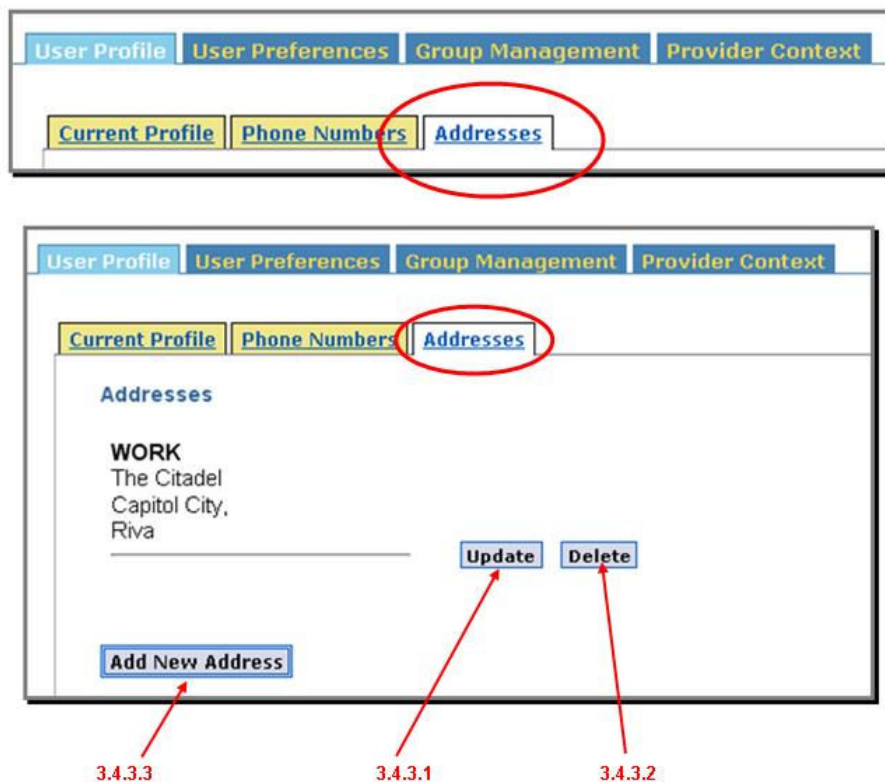


Figure 37. User Profile Addresses Tab

3.4.3.1 Modify Existing Address

- a. To modify the address information associated with this User Name, click the "Update" button next to the address you wish to modify (see Figure 37).

The "Update User Address" screen appears (see Figure 38).

Figure 38. Update User Address Screen

- b. You may now modify any of the fields. Note that if a field is required you may modify it but you may not delete it. See Appendix B, Data Entities for details on these fields.
 - 1) Address Name*
 - 2) US Address Format* (check the box of "Yes")
 - 3) Street1*, Street2, Street3, Street4, Street5
 - 4) City*
 - 5) State†
 - 6) Zip/Postal Code†
 - 7) Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

 - a) If OTHER is selected, a "Custom Country Name" field appears and is required
 - 8) Special Instructions
- c. Click the "Update" button to update the address
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Update" button again. The update will not be complete until all entered data passes data validation.

The screenshot shows a web form titled "Update User Address". The form contains several input fields and a "US Format" checkbox. The "Address Name" field contains "WORK". The "Street1" field contains "The Citadel". The "City" field is empty and has a red validation error message below it: "Validation Error: Value is required." The "State" field is empty. The "Zip/Postal code" field is empty. The "Country" dropdown menu is set to "OTHER" with a custom name "Riva" entered below it. The "Special Instructions" field is empty. At the bottom, there are "Update" and "Cancel" buttons.

Update User Address

*Address Name: (work, home, etc.) ☐ US Format: ☐

WORK

*Street1: The Citadel

Street2:

Street3:

Street4:

Street5:

*City: State:

Validation Error: Value is required.

Zip/Postal code: *Country: OTHER Riva

Enter custom country name.

Special Instructions

*(Required Field)

Update Cancel

Figure 39. Update Address Data Validation Error

- e. At any time, if you do not wish to update the address, click the "Cancel" button.

3.4.3.2 Delete an Existing Address

- To delete the address associated with this User Name, click the "Delete" button next to the address you wish to delete (see Figure 37).
- A confirmation dialog box will appear.
- If you wish to continue the address deletion, click the "OK" button. (Figure 40)
- If you do not wish to continue with the deletion, click the "Cancel" button. (Figure 40)

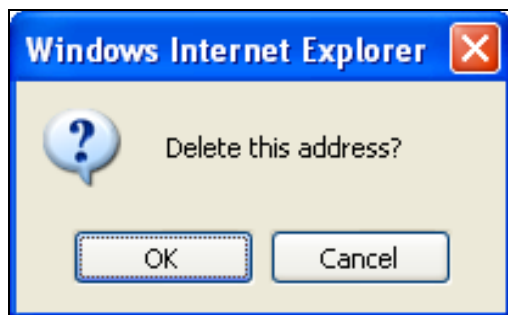


Figure 40. Delete Address Confirmation Dialog

3.4.3.3 Add A New Address

- a. To add a new address, click the "Add New Address " button.

The "Add User Address" screen will appear (see Figure 41).

A screenshot of the 'Add User Address' screen in a web application. The screen has a blue header with tabs: 'User Profile', 'User Preferences', 'Group Management', and 'Provider Context'. Below the header is the title 'Add User Address'. The main form area contains several fields: '*Address Name: (work, home, etc.)' with the value 'BUSINESS 2'; 'US Format: ☒ Zip & State are required'; '*Street1:' with 'Suite 210'; 'Street2:' with '100 Main Street'; 'Street3:', 'Street4:', and 'Street5:' (all empty); '*City:' with 'Any City'; '*State:' with a dropdown menu showing 'AK'; '*Zip/Postal code:' with '11111'; and '*Country:' with a dropdown menu showing 'United States'. There is a 'Special Instructions' text area at the bottom. At the very bottom are 'Add' and 'Cancel' buttons. A large red circle is drawn around the entire form area. A red arrow points from the text '3.4.3.2 b.' to the right side of the circle. Another red arrow points from the text '3.4.3.2 c.' to the 'Add' button. A third red arrow points from the text '3.4.3.2 e.' to the 'Cancel' button.

Figure 41. Add User Address Screen

- b. You may now enter the requested information for the new address. Note that if a field is required, it is marked with an asterisk (*). See Appendix B, Data Entities for details on these fields.

- 1) Address Name*
- 2) US Address Format* (check the box of "Yes")

3) Street1*, Street2, Street3, Street4, Street5

4) City*

5) State†

6) Zip/Postal Code†

7) Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

a) If OTHER is selected, a "Custom Country Name" field appears and is required

8) Special Instructions

c. Click the "Add" button to add the new address

d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation. (See Figure 39 for sample)

e. At any time, if you do not wish to add the address, click the "Cancel" button.

3.5 User Preferences



The User Preferences information contains information for ECHO to use when processing your queries, subscriptions, orders, etc.

The screenshot shows the 'User Preferences' screen. At the top is a navigation bar with tabs: 'User Profile', 'User Preferences', 'Group Management', and 'Provider Context'. Below the navigation bar, the 'User Preferences' section is titled. It contains the following fields and buttons:

- Order Notification Level:** CRITICAL (labeled 3.5.2.1)
- Custom Properties XML:** (labeled 3.5.2.2 a.)
- Update** button (labeled 3.5.2)
- General Contact** section:
 - Title:** WORK
 - First Name:** FirstName
 - Middle Initial:**
 - Last Name:** LastName
 - Role:** General Contact
 - Email:** General@contact.com
 - Organization:** Suite 210, 100 Main Street, Any City, AK 11111, United States
 - Phone Type** and **Phone Number** table:

Phone Type	Phone Number
BUSINESS	555-555-1111
 - Update General Contact** button (labeled 3.5.3)
 - Delete General Contact** button
- Shipping Contact** section:
 - Add Shipping Contact** button
- Billing Contact** section:
 - Add Billing Contact** button
- Clear Preferences** button (labeled 3.5.1)

Red annotations include a box on the left containing '3.5.2', '3.5.2.1 a.', and '3.5.2.2 a.' with arrows pointing to the 'Update' button and the 'Custom Properties XML' field. A large red circle highlights the 'General Contact' section. A red arrow points from '3.5.1 (Only displayed when at least one preference has been set/changed from default)' to the 'Clear Preferences' button.

Figure 42. User Preferences Screen After Changes

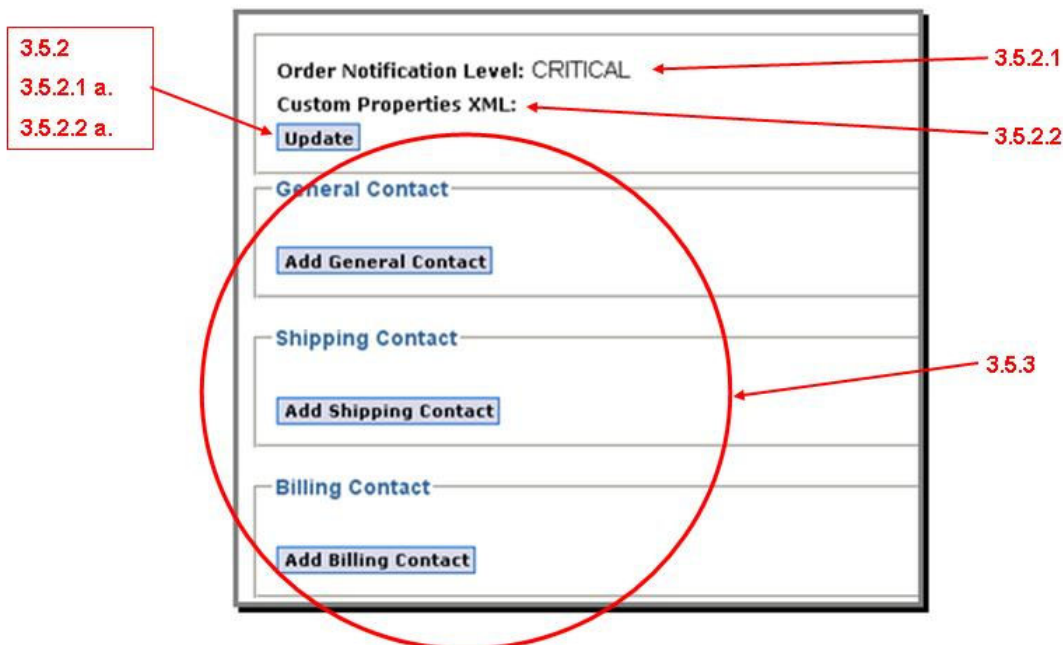


Figure 43. User Preferences Screen, Defaults Only

There three general preferences that can be set/changed:

- Order Notification Level—the level of details to receive for status updates on submitted orders
- Custom Properties XML—includes XML properties required by an ECHO client application
- Contacts—general, shipping, and billing contacts for you as a user, in the event you wish to order data

Additionally, if at least one of the above preferences has been set, you will have the option to "Clear Preferences"

3.5.1 Clear Preferences

- To clear ALL user preferences, click the "Clear Preferences" button (see Figure 42).

A clear confirmation box will appear (see Figure 44).

- Click "OK" to continue clearing ALL preferences or "Cancel" to cancel the clear.

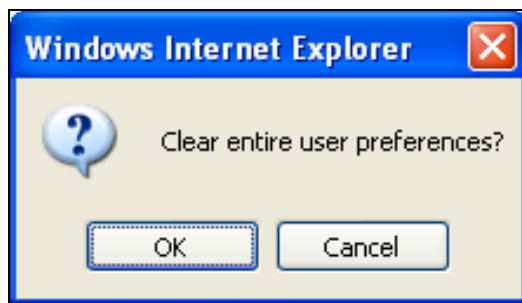


Figure 44. Clear ALL User Preferences Confirmation

Note that this deletes ALL preferences specified...all contact information as well as the Order Notification Level and the Custom Properties XML. Use this with care.

3.5.2 User Preferences Box

- To update the user preferences, click the "Update" button in the "User Preferences" box (see Figure 42 & Figure 43).

The "Update User Preferences" screen appears (see Figure 45).

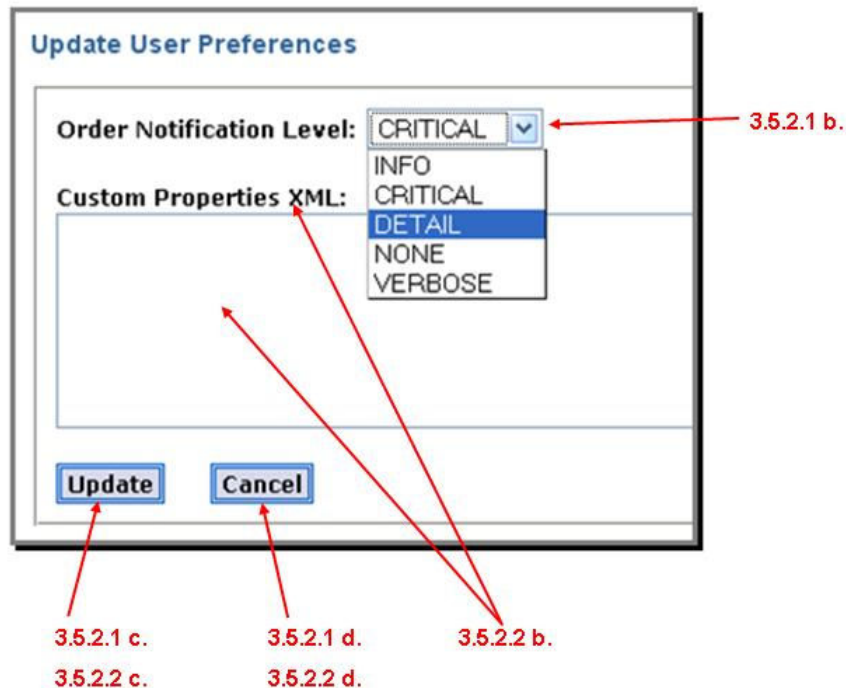


Figure 45. Update User Preferences

3.5.2.1 Order Notification Level

The order notification level specifies to what detail you wish to be notified of rmail status updates on submitted orders (see Figure 45). The default is CRITICAL. The following are the valid notification levels:

- VERBOSE—The system will email all state changes and status message updates to the user.
- DETAIL—The system will email the user when only state changes are made.
- INFO—The system will email the user when the operation reaches a final state.
- CRITICAL—The system will email the user when the operation has failed or is rejected. <DEFAULT>
- NONE—The system will not send the user email and the user will have to come back to ECHO and use operations on the specific service to obtain status information.

The emails received are defined in the following table:

Event	Verbose	Detail	Info	Critical
Failure Provider Order State Change (3)	X	X	X	X
Success Provider Order States (2)	X	X	X	
Intermediate Provider Order States (1)	X	X		
Provider Order Status Update	X			

The order states that trigger an email are:

- PROCESSING
- QUOTED, CLOSED
- QUOTE_FAILED, QUOTE_REJECTED, SUBMIT_FAILED, SUBMIT_REJECTED, CANCELLED

To change your notification level:

- a. Click the "Update" button under the "Custom Properties XML" line.
- b. Select your notification level from the drop down list next to the "Order Notification Level" label.
- c. Click the "Update" button to finalize your choice
- d. At any time, if you do not want to update the Order Notification Level, click the "Cancel" button to cancel the change

3.5.2.2 Custom Properties XML

The Custom Properties XML is used to set values for custom properties that are required by an ECHO client application (see Figure 45). Any valid XML is accepted.

To setup a custom property:

- a. Click the "Update" button under the "Custom Properties XML" line.
- b. In the "Custom Properties XML" box, enter your XML.
- c. Click the "Update" button to finalize your setup
- d. At any time, if you do not want to update the Custom Properties XML, click the "Cancel" button to cancel the change

3.5.3 Contact Boxes

There are three contacts needed when placing an order in ECHO:

- General Contact—identifies who is placing the order
- Shipping Contact—indicates where an order should be physically shipped. This is not applicable if the provider is using FTP for order fulfillment.
- Billing Contact—identifies who will be paying the bill for the order

Note that if there is no data currently entered for a contact, then the only action available is to add the contact. If there is data, entered, then you may update or delete the contact.

Regardless of the contact, the data entered and actions are the same; therefore, data entry and actions will only be described here once.

3.5.3.1 Add Contact

- a. To add data for a contact, click the "Add <type> Contact" button (<type> = General, Shipping, or Billing, depending on the contact you wish to add) (see Figure 42 and Figure 43).

The "Add User Preferences <type> Contact" screen will appear (see Figure 46).

Add User Preferences Shipping Contact

Shipping Contact Information

Title:

* First Name: Middle Initial: * Last Name:

* Role: * Email:

Organization:

Phone Number(s)

* Phone Type:

* Phone Number:

Mailing Address

* Address Name: US Format: ☐

(work, home, etc.)

Street1:

Street2:

Street3:

Street4:

Street5:

* City: State:

Zip/Postal Code: * Country:

Enter custom country name.

Special Instructions:

* (Required Field)

Figure 46. Add User Preferences Contact Screen

b. You may now enter the requested information for the new contact. Note that if a field is required, it is marked with an asterisk (*). See Appendix B, Data Entities for details on these fields.

1) Contact Information

- a) Title (*New field with ECHO 10*)
- b) First Name*
- c) Middle Initial (*New field with ECHO 10*)
- d) Last Name*
- e) Role*—user's role in the provider's organization
- f) Email Address*
- g) Organization*

2) Phone Number(s)

- a) Phone Type*
 - (1) If Custom is picked, a box appears labeled "Custom Name" and is required
- b) Phone Number*

- c) To add a new phone number, you **must first** click the "Add Phone" button. [If you do not click the "Add Phone" button first, whatever you do will modify the phone number that is displayed—the Phone Type and/or Phone Number.]
- d) If you wish to delete a phone number, click the "Remove Phone" button next to the phone number you wish to delete

Phone Number(s)

* Phone Type: BUSINESS * Phone Number: 555-555-1111 Remove Phone

* Phone Type: BUSINESS_2 * Phone Number: 555-555-1133 Remove Phone

* Phone Type: BUSINESS_FAX * Phone Number: 555-555-3311 Remove Phone

* Phone Type: CUSTOM * Custom Name: Remove Phone

* Phone Number:

Add Phone

3.5.3.1 b. 2)c)

3.5.3.1 b. 2)a)(1)

3.5.3.1 b. 2)d)

Figure 47. User Preferences Add/Update Contact Phone Numbers

3) Mailing Address

- a) Address Name*
- b) US Address Format* (check the box of "Yes")
- c) Street1*, Street2, Street3, Street4, Street5
- d) City*
- e) State†
- f) Zip/Postal Code†
- g) Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

- (1) If OTHER is selected, a "Custom Country Name" field appears and is required

h) Special Instructions

- c. Click the "Add" button when done
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation.
- e. At any time, if you do not wish to add the contact, click the "Cancel" button.

3.5.3.2 Update Contact

Update User Preferences Shipping Contact

Shipping Contact Information

Title:

* First Name: John Middle Initial: * Last Name: Shipper

* Role: Shipping Mgr * Email: ECHO00Doc@aim.com

Organization:

Phone Number(s)

* Phone Type: BUSINESS

* Phone Number: 555-555-1212

Mailing Address

* Address Name: SHIPPING US Format: ☐

* Street1: The Citadel

Street2: North Tower

Street3:

Street4:

Street5:

* City: Capitol City State:

Zip/Postal Code: * Country: OTHER ☒

Riva

Enter custom country name.

Special Instructions:

* (Required Field)

Figure 48. User Preferences Update Contact

- a. To update data for a contact, click the "Update <type> Contact" button (<type> = General, Shipping, or Billing, depending on the contact you wish to update) (see Figure 42 and Figure 43)

The "Update User Preferences <type> Contact" screen will appear (see Figure 48).

- b. You may now update the requested information for the contact. When done, click the "Update" button to perform the actual update. See section 3.5.3.1, Add Contact for details on the fields that are modifiable and the required vs. optional fields.
- c. Click the "Update" button when done
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Update" button again. The update will not be complete until all entered data passes data validation.
- e. At any time, if you do not wish to update the contact, click the "Cancel" button.

3.5.3.3 Delete Contact

If a contact exists, the option to delete it is available.

- a. To delete a contact, click the "Delete <type> Contact" button (<type> = General, Shipping, or Billing, depending on the contact you wish to delete) (see Figure 42 and Figure 43).

A delete confirmation box will appear (see Figure 49).

- b. Click the "OK" button to continue with the deletion or
- c. Click the "Cancel" button to cancel the deletion.

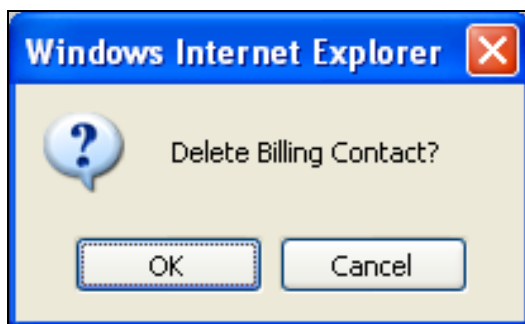


Figure 49. User Preferences Delete Contact Confirmation

3.6 Group Management



The Group Management tab provides all activities that an ECHO user needs to maintain and manage groups of users. Groups are aggregations of ECHO registered users, and there are rules governing the membership actions that can be invoked on a group. Each group consists of one owner and one or more managers. Only registered users with the provider role (Providers or Administrators with a Provider role) can create groups, but the provider can then delegate group management to any registered user. A group manager is responsible for adding and removing ECHO registered users to the group. A group manager is also responsible for the management of the group managers. Groups are used to communicate among groups of users and their managers. Groups are also used in the Data Management when permissions are created in metadata.

The following rules governing the membership actions that can be invoked on a group:

- Each group consists of one or more managers and one or more members
- A group must have at least one manager
- Attempting to remove the last manager of a group results in an error
- A group manager is responsible for removing ECHO registered users from, and adding them to, the group



Figure 50. Group Management, Manager of a Group, No Authority to Add Groups
(Note the "Add New Group" button is disabled)

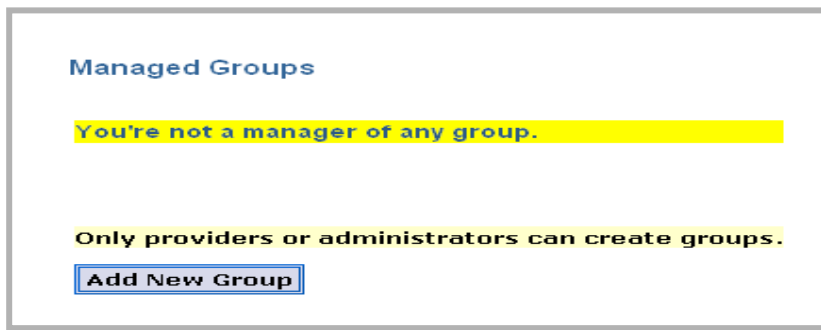


Figure 51. Group Management, Not the Manager of a Group, but do have Authority to Add Groups



Figure 52. Group management, manager of a Group and has Authority to Add Groups

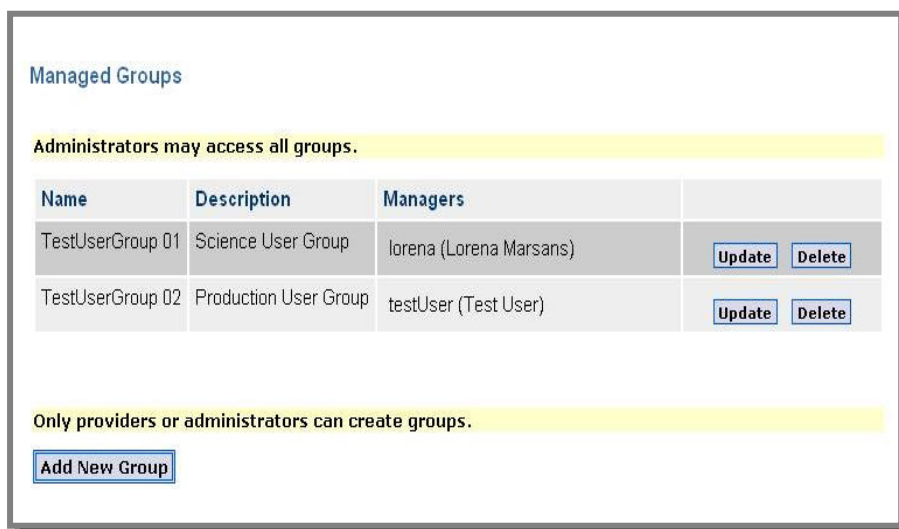


Figure 53. Administrator, has Authority to Add Groups, Managers are displayed

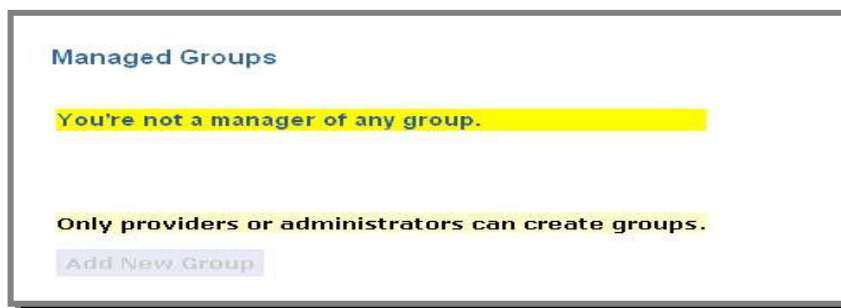


Figure 54. Group Management, Not the Manager of a Group and has no Authority to Add Groups

3.6.1 View Groups

Only managers of a group may view a group. Groups can be viewed in two ways: summary and detailed.

3.6.1.1 Summary

The summary view is the initial list of groups you see when you click the "Group Management" tab. If you are the manager of one or more groups, those groups will be listed with "Update" and "Delete" buttons next to each button (see Figure 50 and Figure 52).

Additionally, the buttons for viewing group details and, if you have a Provider or Administrator role, adding a new group are at the bottom of the list.

3.6.1.2 Details



Name	Description	Managers	Members
TestUser Group 01	Science User Group	TestUser (Kelly O'Conner)	TestUser (Kelly O'Conner) Belgarion (Garion Riva)
TestUser Group 02	Production User Group	ProductionUser (Sarah Ramirez) TestUser (Kelly O'Conner)	Belgarion (Garion Riva) ProductionUser (Sarah Ramirez) TestUser (Kelly O'Conner)

Cancel

Figure 55. View Managed Group Details Screen

- a. To view the details of your groups, click the "View Group Details" button on the "Managed Groups" screen (see Figure 52).

The "View Managed Group Details" screen appears (see Figure 55).

- b. To return, click the "Cancel" button

3.6.2 Create/Add a Group

Add New Group

Only providers or administrators can create groups.

* **Group Name:**
Group of Scientists

* **Description:**
This is a random group of scientists

* **Managers:** (separate user names with ";")
Belgarion

* **Members:** (separate user names with ";")
Ehlana; Cendra

Add **Cancel**

3.6.2 c. 3.6.2 d. 3.6.2 b.

Figure 56. Add New Group Screen

- a. To create a new group, click the "Add New Group" button on the "Managed Groups" screen (Figure 52). The "Add New Group" screen appears (Figure 56).
- b. Enter the requested data. Note that all fields are required. This means that a new group must have:
 - 1) A name
 - 2) A description
 - 3) At least one manager
 - 4) At least one member
- c. Click the "Add" button when done
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation.
- e. If you do not wish to add the new group, click the "Cancel" button.

3.6.3 Update/Manage a Group

- a. To update an existing group, click the "Update" button next to group you wish to modify on the "Managed Groups" screen (Figure 52).
The "Manage Group" screen appears allowing you to modify the group you selected for update (Figure 57).
- b. If at any time you do not wish to update the group, click the "Cancel" button.

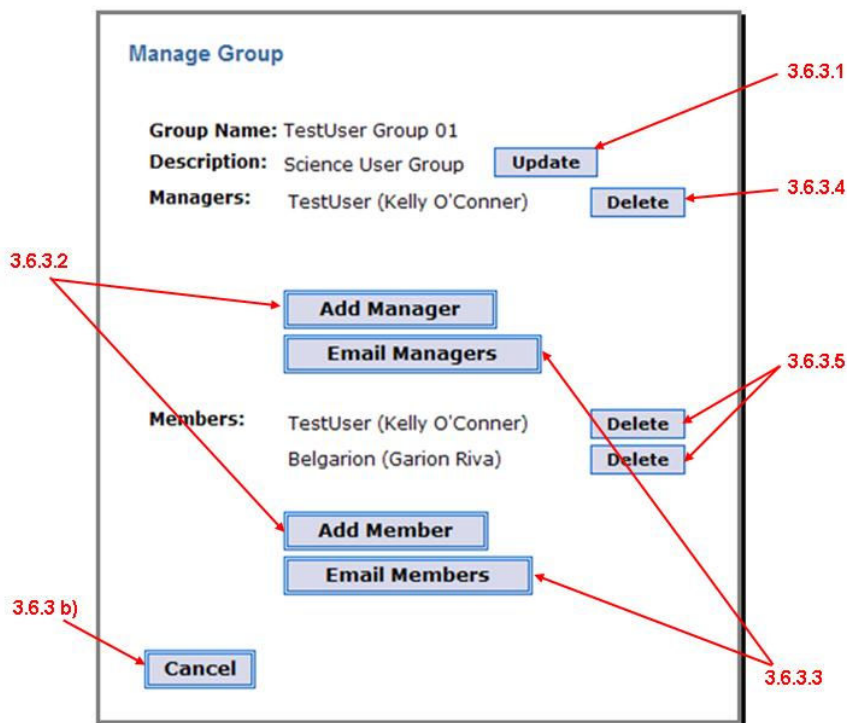


Figure 57. Update/Manage Group Screen

3.6.3.1 Update Description

- a. To update the group's description, click the "Update" button next to the "Description" on the "Manage Group" screen (Figure 57).

The "Update Description" screen appears (Figure 58).

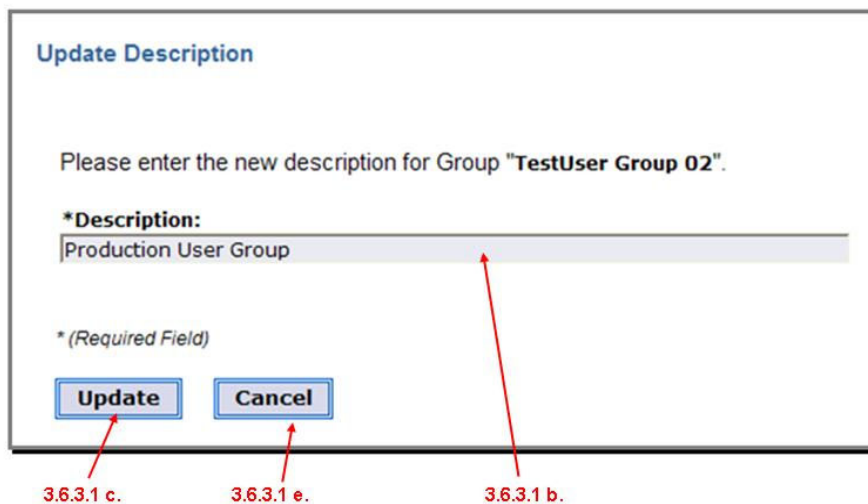


Figure 58. Update Group Description

- b. To modify the description, make your changes in the "Description" box
- c. When done, click the "Update" button.

Note that "Description" is required so while you make changes, you cannot delete it altogether.

- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Update" button again. The update will not be complete until all entered data passes data validation.
- e. At any time, if you do not wish to update the group, click the "Cancel" button.

3.6.3.2 Add Manager or Member

- a. To add a new manager to the group, click the "Add Manager" button (Figure 57). OR

To add a new member to the group, click the "Add Member" button (Figure 57).

The appropriate screen appears ("Add Manager" for manager/"Add Member" for member) (Figure 59 and Figure 60).

Add Manager

Please enter the user name to add as manager of Group "TestUser Group 02".

*User Name:

☐ Notify

* (Required Field)

Add Manager **Cancel**

3.6.3.2 c. 3.6.3.2 d. 3.6.3.2 f. 3.6.3.2 b.

Figure 59. Add Manager to a Group

Add Member

Please enter the user name to add as member of Group "TestUser Group 02".

*User Name:

☐ Notify

Add Member **Cancel**

3.6.3.2 c. 3.6.3.2 d. 3.6.3.2 f. 3.6.3.2 b.

Figure 60. Add Member to a Group

- b. Enter the user name of the person being added as either a manager of the group or member of the group.
- c. If you wish to notify the new manager or member of this action, check the "Notify" box

- d. To complete the addition of the new manager, click the "Add Manager" button OR
To complete the addition of the new member to the group, click the "Add Member" button
- e. The "User Name" will be validated against the list of ECHO registered users. If the user name is invalid:
 - 1) An error message will be displayed (see Figure 61).
 - 2) Correct the user name and click the "Add" button again ("Add Manager" for adding new manager/"Add Member" for adding a new member)
 - 3) The add will not be complete until a valid user name is entered

Note that you may only add one new manager or member at a time.
- f. At anytime, if you do not wish to add a manager or member to the group, click the "Cancel" button.

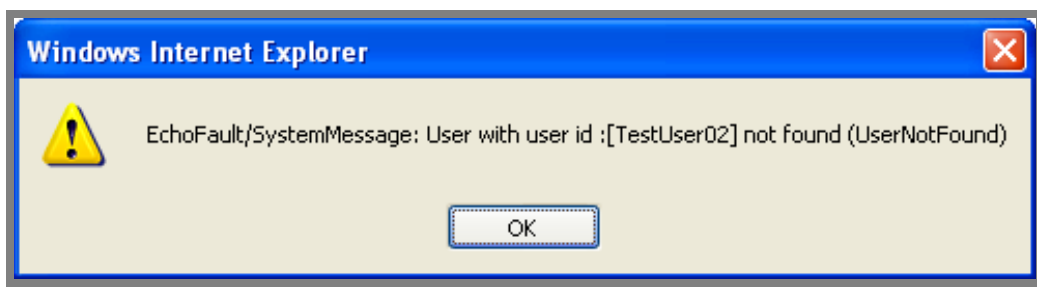


Figure 61. Invalid User Name for Manager or Member of a Group

3.6.3.3 Email Managers or Members

PUMP gives you the ability to send an email to all managers of a group or all the members of a group.

- a. From the "Manage Group" screen (see Figure 57), click the "Email Managers" to send an email to all managers or "Email Members" to send an email to all members of the group.

The appropriate screen appears—"Send Email to Group Managers" or "Send Email to Group Members" (see Figure 62 and Figure 63).

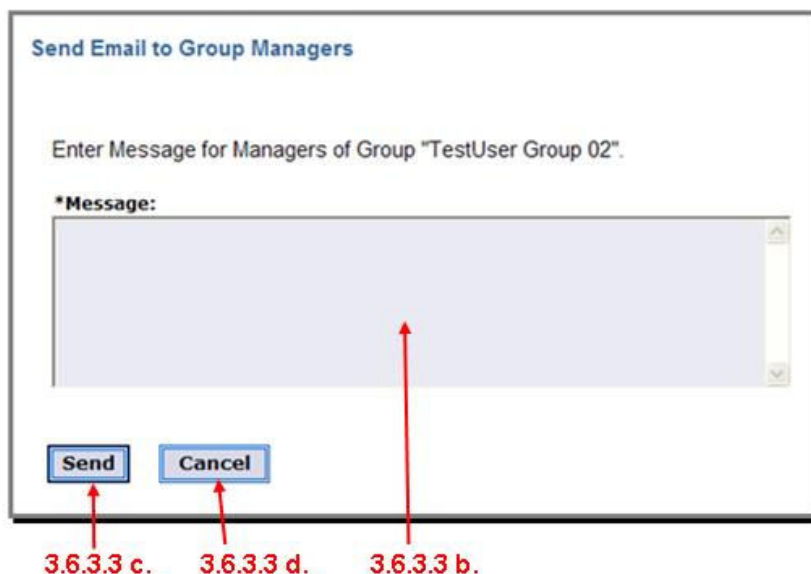


Figure 62. Email All Managers of a Group

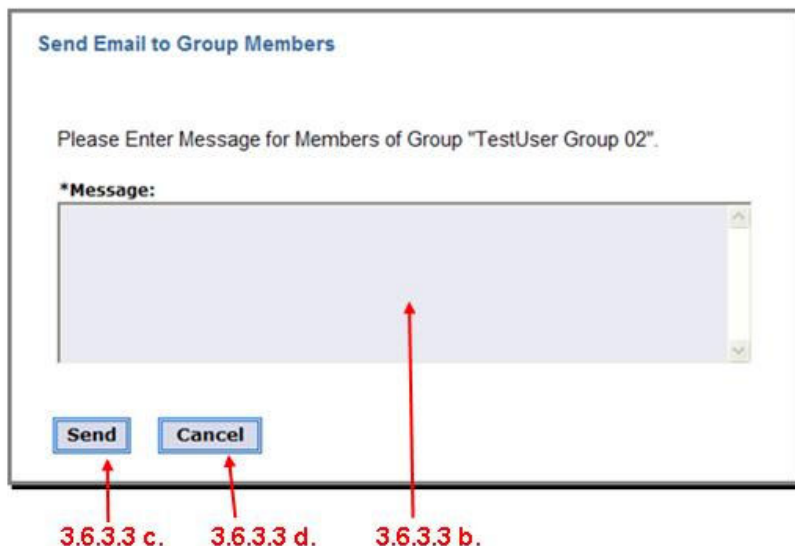


Figure 63. Email All Members of a Group

- b. Enter the Message you wish to send. Note that this field is required.
- c. Click the "Send" button.
- d. At anytime, if you do not wish to email the group's managers or members, click the "Cancel" button.

3.6.3.4 Delete Managers

Managers may be deleted. However, there must always be at least one manager of the group. If you try to delete the last manager of a group, you will get an error message and the action will be denied. To delete a Manager:

- a. From the "Manage Group" screen (see Figure 57), click the "Delete" button next to the Manager you wish to delete.
The "Delete Manager" screen appears (see Figure 64).
- b. If you wish to notify the manager of this action, check the "Notify" box
- c. Click the "Delete" button to perform the delete
- d. A check is made to ensure the Manager being deleted is not the last Manager of the group. If this is the last manager, an error message is displayed telling you that at least one manager is required. The actual message references the managers by their unique ID in ECHO, a GUID.
 - 1) If there is no error, the manager is deleted (Figure 64)
 - 2) If the error message is displayed, click the "OK" button (Figure 65)
- e. At anytime, if you wish to cancel the delete, click the "Cancel" button

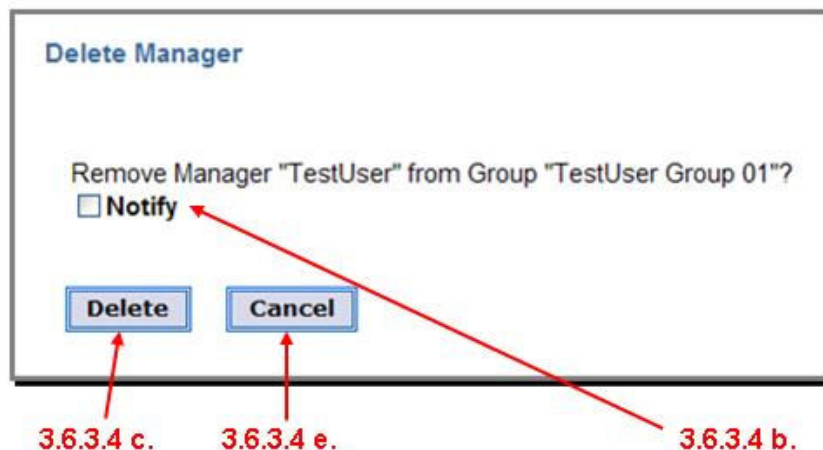


Figure 64. Deleting a Manager

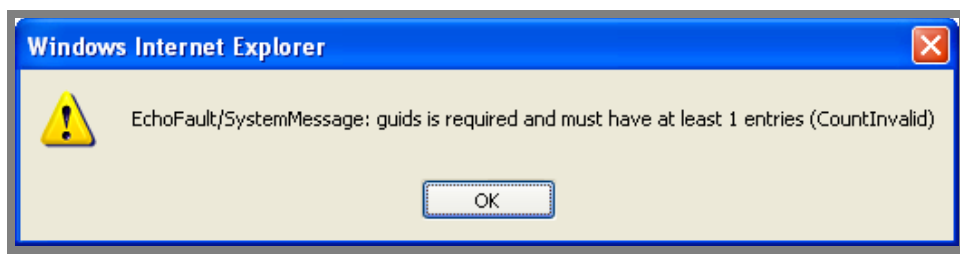


Figure 65. Attempting to Delete the Last Manager of a Group

3.6.3.5 Delete Members

Group members may also be deleted. It is possible to have a group with no members. To delete a Member:

- a. From the "Manage Group" screen (see Figure 57), click the "Delete" button next to the Member you wish to delete.

The "Delete Member" screen appears (see Figure 66).

- b. If you wish to notify the member of this action, check the "Notify" box
- c. Click the "Delete" button to perform the delete
- d. At anytime, if you wish to cancel the delete, click the "Cancel" button

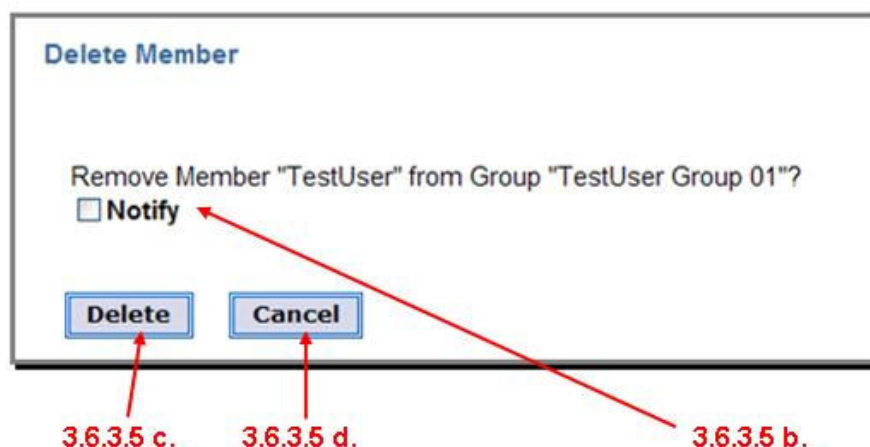


Figure 66. Delete a Member from a Group

3.6.4 Delete a Group

- a. To delete a group from ECHO altogether, click the "Delete" button next to the group you wish to deleted on the "Managed Groups" screen (see Figure 52).

The "Delete Group" screen appears (see Figure 67)

- b. If you wish to notify the Managers and Members of the group that the group is being deleted, check the "Notify Managers and Members" box.
- c. To complete the deletion, click the "Delete" button.
- d. At anytime, if you wish to cancel the delete, click the "Cancel" button

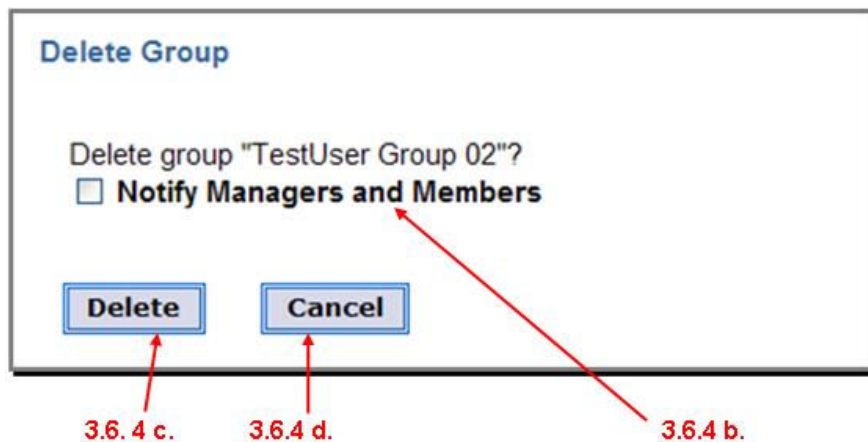


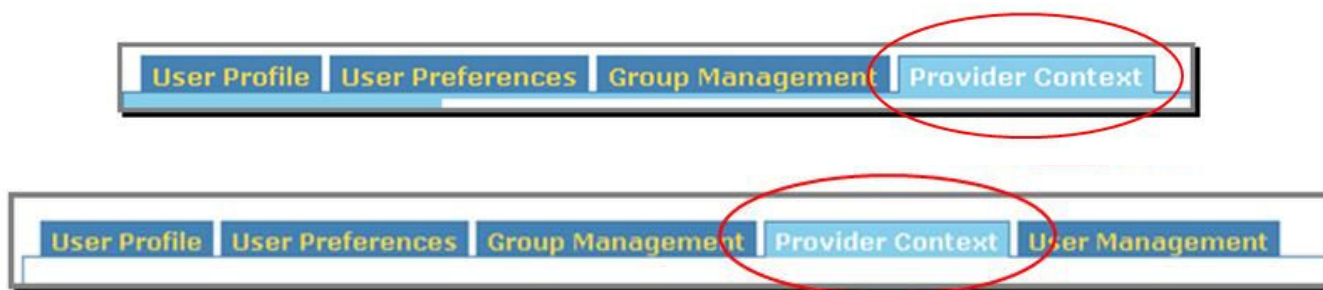
Figure 67. Delete a Group

3.6.5 Rename a Group

Groups can no longer be renamed. To perform the same function as a rename:

- a. Create a new group with the same managers, members, and description but with the new name (see section 3.6.2, Create/Add a Group)
- b. Delete the group with the old name (see section 3.6.4, Delete a Group)

3.7 Provider Context (Providers and Administrators Only)



To be able to perform provider-specific functions, a user must have a provider assigned to him/her. Only users with a Provider role or administrators will have the "Provider Context" tab and functionality.

Note that Administrators initially have no provider role. However, they may assign themselves a provider role for the duration of their current session. To assign himself a provider role, the Administrator must set his "Provider Context." Once this is done, the Administrator has all provider functionality for the provider he is "acting as".

Users who are not Administrators but who have a provider role will also have provider functionality available.

Users may have more than one provider role, each of which is associated with one provider in the ECHO system. If a user has more than one provider role, he must tell the system which provider he currently wants to represent. This is the "provider context". The provider context indicates the current provider that is represented, and as the name implies, it is to this provider that the provider-oriented functions are applied.

For users who are not administrators but who have a single provider role, the initial view of this tab merely informs them of their provider role and provider ID (see Figure 68).

For Administrators and users with multiple provider roles, the initial view of this tab requires them to select a provider before continuing with provider functions (see Figure 71 for Administrators and users with multiple provider roles).

Users who already have the provider role and administrators with a provider role may assign other users a provider role for the provider they currently represent.

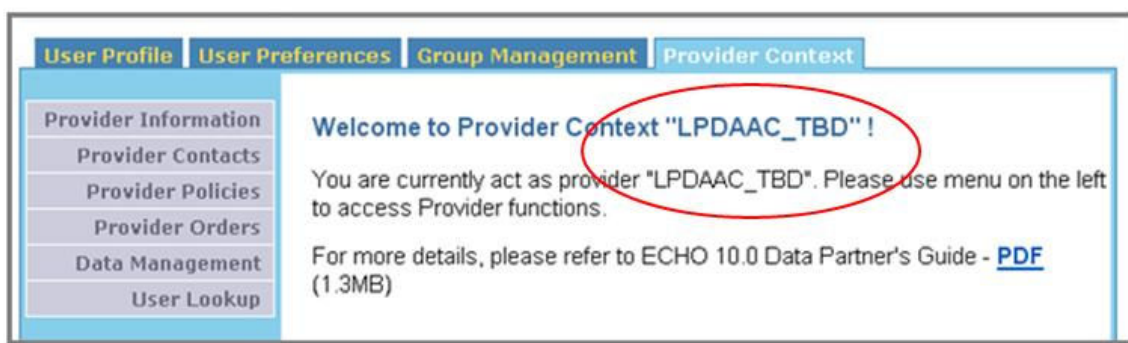


Figure 68. Provider (non-Administrator) w/One Provider Role Provider Context screen



Figure 69. Administrator and Users w/Multiple Provider Roles Provider Context Screen

3.7.1 Set Provider Context

Administrators or users with multiple provider roles must first select a provider to "act as". The "Provider Context" screen offers them this ability. Administrators select from the list of all registered ECHO providers (see Figure 71) while users with multiple provider roles select from the list of providers they have a provider role for (see Figure 70).

Until a provider role has been selected, no other provider functions will be offered.

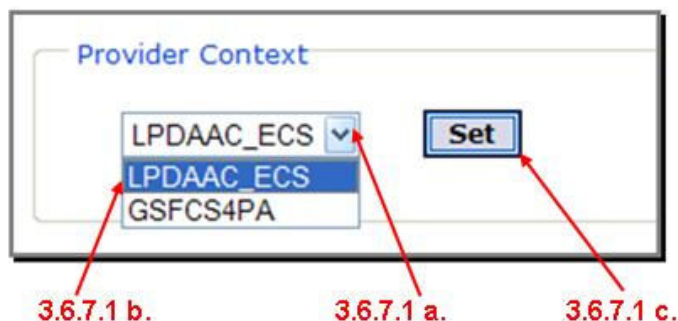


Figure 70. User with Multiple Provider Roles

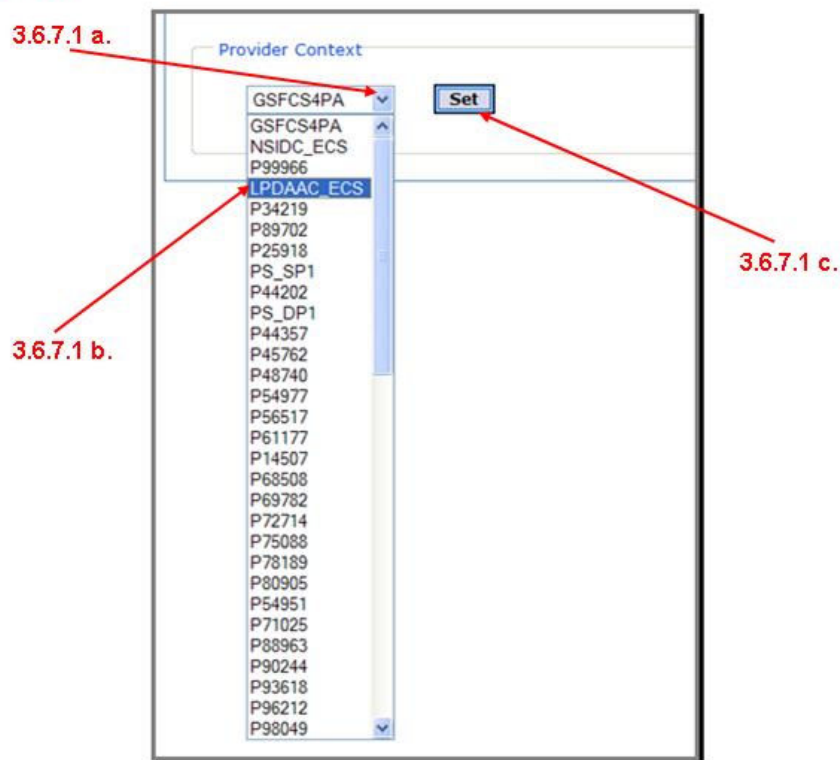


Figure 71. Admin: Selecting a Provider for Provider Context

To select a provider to assign yourself to:

- Click on the "Provider Context" box's arrow to see the drop down list of all available providers.
- Scroll down to find the provider you wish to act as and select it.
- Click on the "Set" button

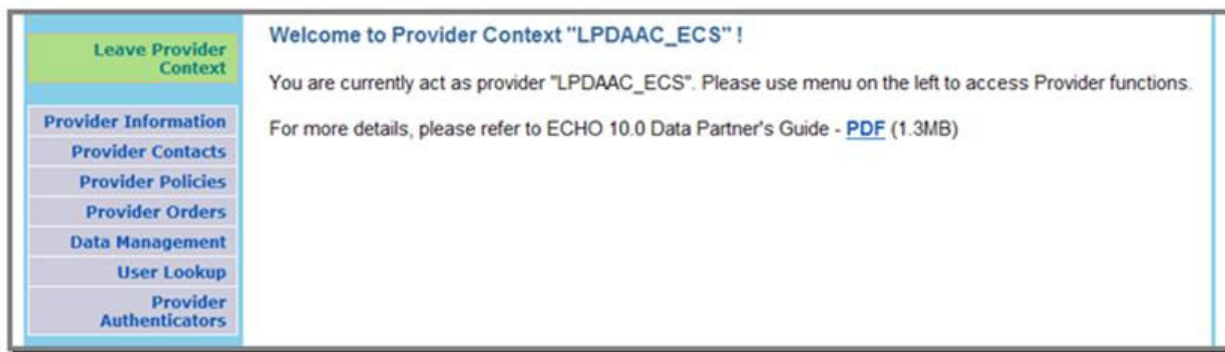


Figure 72. Provider Context Set for an Administrator or a User w/Multiple Provider Roles

Once the provider context is set (Figure 72), the Administrator now has provider functionality. Note the extra function—the user may remove his provider role at any time. Note that the provider context (role) is only temporary—it will only last as long as the user is logged on. Once logged off, the user reverts back to no provider role set.

3.7.2 Leave Provider Context

Administrators and users with multiple provider roles may remove the provider context they have set. For Administrators, this may be necessary to continue with other work that is non-provider specific or to switch to another provider. For users with multiple provider roles, this may be necessary to allow them to switch to another provider.

Once the provider context has been left, provider functions are no longer available.

To leave the Provider context, click the "Leave Provider Context" link on the left side in the navigation panel (see Figure 73).

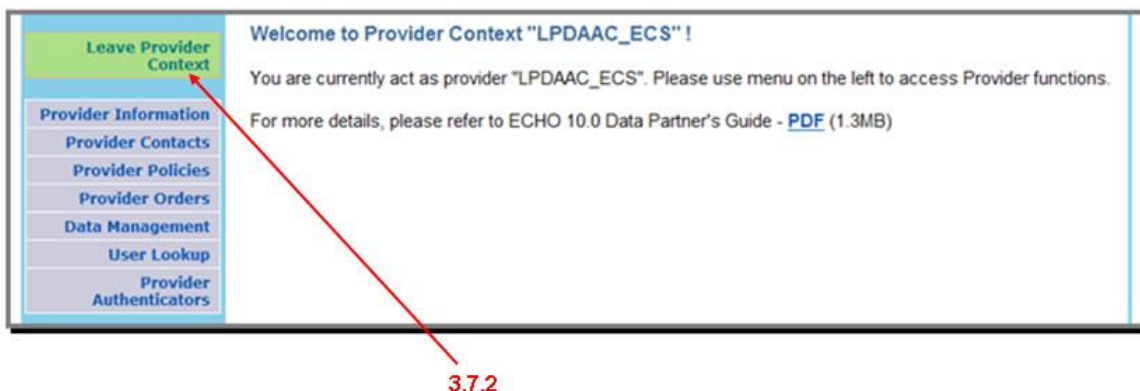


Figure 73. Leave Provider Context for an Administrator or a User w/Multiple Provider Roles

3.7.3 Provider Information

This screen displays the user names of all users with a provider role for this provider.

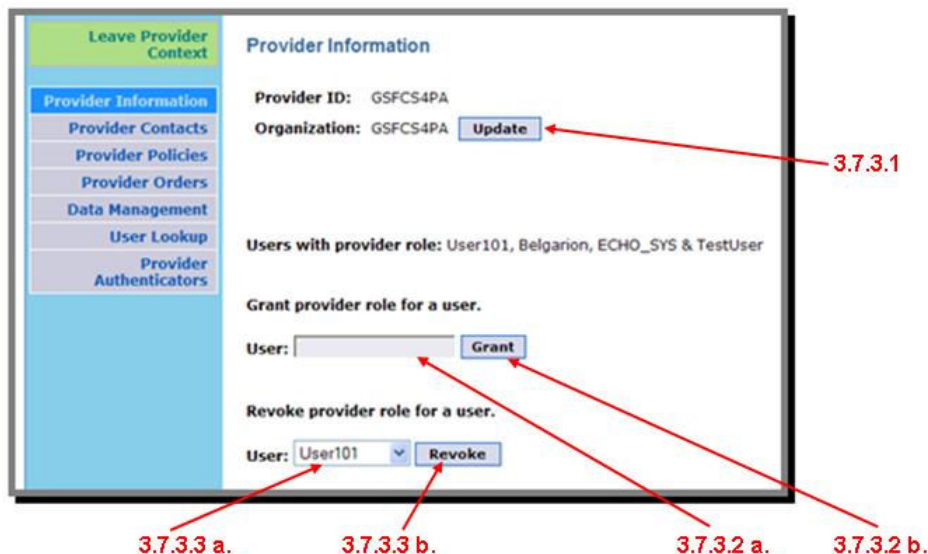


Figure 74. Provider Information Screen

3.7.3.1 Edit Provider Information

- a. To edit the Organization name for the provider, click the "Update" button next to the "Organization" box (Figure 74)

The "Edit Provider Information" screen appears (see Figure 75).

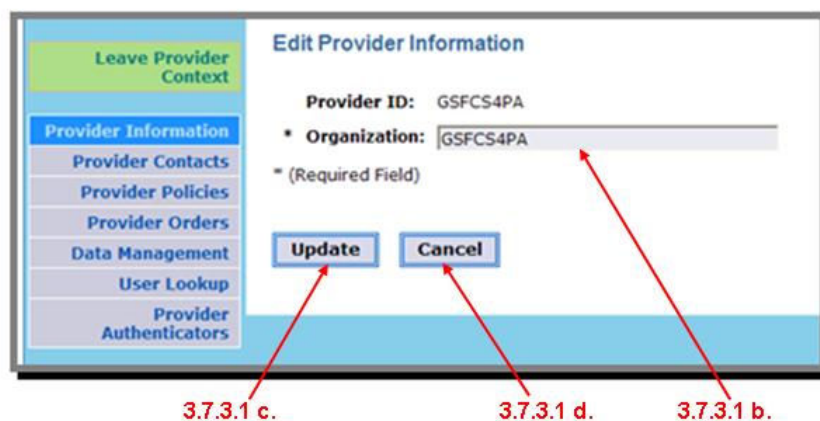


Figure 75. Edit Provider Information

- b. Make the desired changes to the "Organization". This field is required so while you may change it, you may not delete the name altogether.
- c. Click the "Update" button when done.
- d. At any time, if you do not wish to update the Organization, click the "Cancel" button to cancel the update.

3.7.3.2 Grant Provider Role

- a. To grant a provider role to a user, enter their user name in the "User" box under the "Grant Provider Role for User" label (see Figure 74).
- b. Click the "Grant" button to grant access.

3.7.3.3 Grant/Revoke Provider Role

- a. To revoke a provider role from a user, select their user name from the "User" box under the "Revoke Provider Role for User" label (see Figure 74).
- b. Click the "Revoke" button to revoke access.

3.7.4 Provider Contacts

The provider contacts are similar to other contacts already described in this document. In this case, it is the contact information that an ECHO user may use to contact the provider. Multiple contacts are allowed, each with a name associated with it.

At a minimum, every provider is required to have a contact with a name "User Services". This is the contact information that will be used for emails sent to users as a result of an order status or order state changes.

The initial view of this screen is a list of all the contacts associated with this provider and "Edit" and "Delete" buttons next to each contact (see Figure 76).

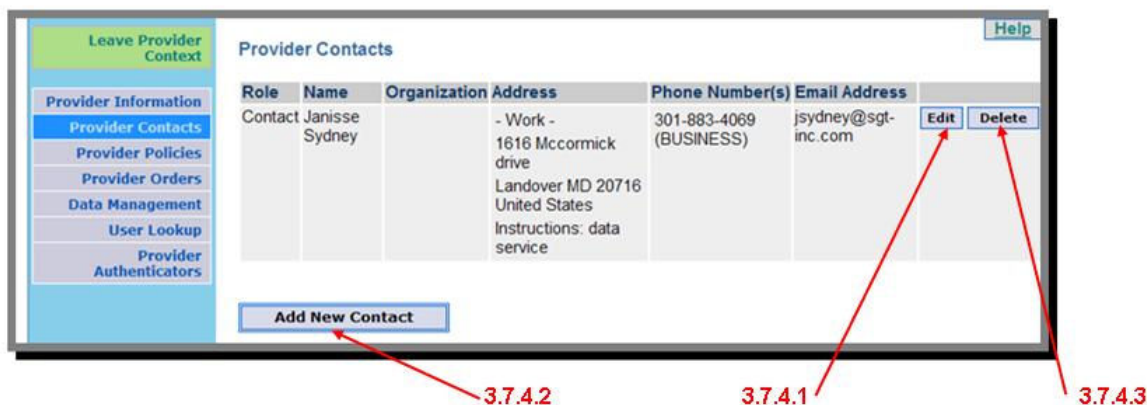


Figure 76. Provider Contacts Screen

3.7.4.1 Edit a Provider Contact

- On the "Provider Contacts" screen, click the "Edit" button next to the contact you wish to edit.

The "Edit Contact" screen appears (see Figure 77). See Appendix B, Data Entities for details on these fields.

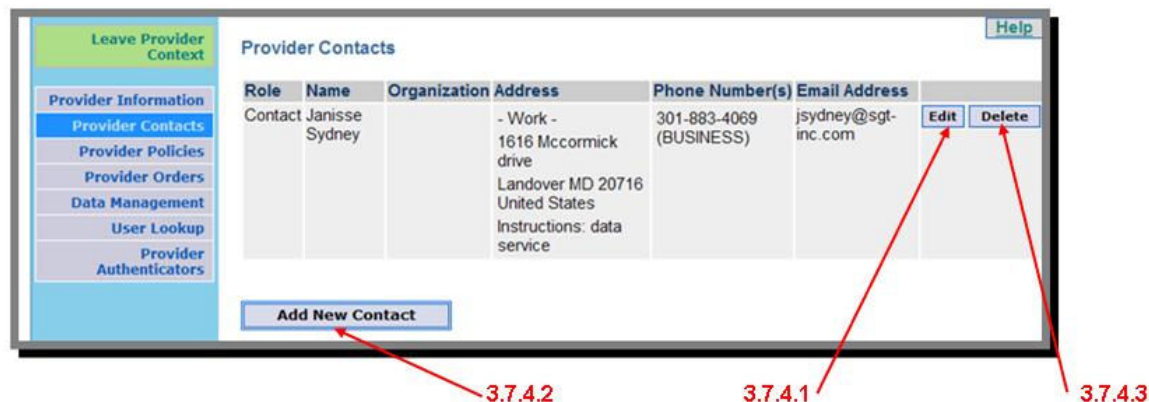


Figure 77. Edit Provider Contact Screen

- Enter the requested information. Required fields are marked with an asterisk (*). Fields marked with a † are required IF the address is a US-formatted address.
 - Contact Information
 - Title (*New field with ECHO 10*)
 - First Name*
 - Middle Initial (*New field with ECHO 10*)
 - Last Name*

e) Role*—user's role in the provider's organization

f) Email Address*

g) Organization*

2) Phone Number(s)

a) Phone Type*

(1) If Custom is picked, a box appears labeled "Custom Type Name" and is required

b) Phone Number*

c) To add a new phone number, you **must first** click the "Add Phone" button. [If you do not click the "Add Phone" button first, whatever you do will modify the phone number that is displayed—the Phone Type and/or Phone Number.]

d) If you wish to remove a phone number,

(1) Select the phone number you wish to delete from the drop down list

(2) Click the "Remove Phone" button.

3) Mailing Address

a) Address Name*

b) US Address Format* (check the box of "Yes")

c) Street1*, Street2, Street3, Street4, Street5

d) City*

e) State†

f) Zip/Postal Code†

g) Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

(1) If OTHER is selected, a "Custom Country Name" field appears and is required

h) Special Instructions

c. Click the "Update" button when done

d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Update" button again. The update will not be complete until all entered data passes data validation.

e. At any time, if you do not wish to update the contact, click the "Cancel" button.

3.7.4.2 Add a Provider Contact

- a. To add a Provider Contact, click the "Add New Contact" button at the bottom of the contact list. (Figure 76).
The "New Contact" screen appears (see Figure 78).

3.7.4.2 b.

3.7.4.2 c.

3.7.4.2 e.

Figure 78. Add Provider Contact Screen

- b. You may now enter the requested information for the new contact. See section 3.7.4.1, Edit a Provider Contact for details on the fields that are modifiable and the required vs. optional fields.
- c. When done, click the "Add" button to perform the actual add.
- d. Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation.
- e. At any time, if you do not wish to add the contact, click the "Cancel" button.

3.7.4.3 Delete a Provider Contact

- a. On the "Provider Contacts" screen, click the "Delete" button next to the contact you wish to delete.
- b. A delete confirmation box will appear (see Figure 79).
- c. Click "OK" to continue with the deletion or "Cancel" to cancel the deletion.

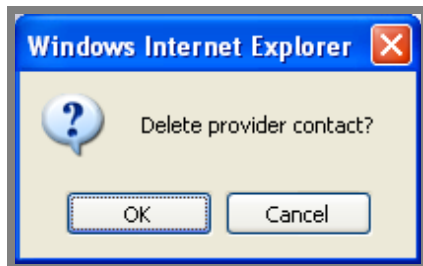


Figure 79. Delete Provider Contact Confirmation Screen

3.7.5 Provider Policies

Providers must be configured to send information to the order adapter to be used to complete the processing of the order. The provider configuration is done using provider policies. Each provider has a set of provider policies that contain information such as the endpoint for the provider (or adapter), the number of attempts to complete the transaction, which operations are supported, and the amount of time between attempts. Some providers using ECHO maintained order adapters require custom properties.

The policies that you select here apply to ordering.

- a. **Retry Attempts.** Specifies the number of times you want the file transfer service to retry sending or receiving a file after a communication failure occurs.
- b. **Retry Wait Time.** Specifies the number of seconds that the file transfer service waits before it retries a failed file transfer
- c. **Order Transactions supported.** Identifies whether the provider:
 - 1) Will provide a Quote for the order (in cases where data are not free) before submitting the order
 - 2) Users may Submit orders.
 - 3) Users may Cancel orders.
- d. **Routing Location**
 - 1) **End Point.** You must specify an "end point," a Uniform Resource Identifier (URI), also known as network address, where ECHO can send the order. The "endpoint" field in the provider policies should always be configured for the actual endpoint to which ECHO should deliver the order. Therefore, if an ECHO order adapter is used, the endpoint should refer to the adapter endpoint. In this case, a custom provider policy would be used to indicate the final endpoint of the provider.
 - 2) **Type.** Indicates the routing mechanism used to contact the provider. The routing mechanism determines if ECHO is using an order adapter or connecting to the provider directly.
 - a) **LEGACY_ORDER_V8.** Indicates the provider is using the WSDL for order fulfillment defined in versions before ECHO V9. When this routing type is used, the endpoint specified in the provider policies should be the endpoint of the service implementing this WSDL. In the case of a provider using an ECHO supported order adapter this would be the endpoint of the order adapter. SSL is not supported through this routing type.
 - b) **ORDER_FULFILLMENT_V9.** Indicates the provider is implementing the version 9/version 10 order fulfillment interface. ECHO will make a connection directly to the endpoint specified in the provider policies and transmit the data. If SSL is enabled, an SSL connection to the provider will be used.
- e. **Order Catalog Items.** If this is set to false ECHO will not allow an order item to contain more than one particular catalog item. Users can use the quantity field to order more than one of the same catalog item in a single order item if this option is set to true.
- f. **A Secure Sockets Layer (SSL) Certificate.** Enables **encryption** of sensitive information during online transactions. Each SSL Certificate contains unique, **authenticated** information about the certificate owner. When a Web browser points to a secured domain, a Secure Sockets Layer handshake authenticates the server (Web site) and the client (Web browser). An encryption method is established with a unique session key.

If the SSL certificate is updated, ECHO Operations will receive an email, review the certificate, and then activate it prior to it being applied. An email is generated by the system to notify the provider when the change has been made.
- g. **Order Catalog Items.** Select "Order supports duplicate catalog items" if you, as a data provider, allow orders to be submitted that contain the same item more than once.
- h. **Custom Properties in XML.**
 - 1) There are no standard custom properties for ECS/ODL providers.

-
- 2) The SOAP dummy provider supports answering the order request in multiple ways. The type of answer requested can be indicated using a custom provider policy:
 - a) `<target.uri>`: custom property element can be set to one of:
 - (1) `urn:dummyprovider1`
 - (2) `urn:dummyprovider2`
 - (3) `urn:dummyprovider3`
 - (4) `urn:dummyprovider4`
 - 3) Providers using an order adapter must configure a custom policy that contains the final endpoint of the provider. This policy is used by the adapter to deliver the order to the provider. ECHO will always deliver the order to the endpoint configured in the main provider policies.
 - a) `<provider.endpoint>`

The endpoint of the final provider. The order adapter will extract this value and send the final order here. The format of the endpoint is dependent upon the final provider type. For ODL providers, this will be in the format of `host:port`. For example, `internal-test.echo.gst.com:29000`. For SOAP providers, this will be an HTTP SOAP URL.
 - 4) LPDAAC's order adapter implementation supports quoting in the adapter. Therefore the adapter requires extra information to complete the quote request. This information is carried in the custom policies. The required custom property elements for LPDAAC are:
 - a) `<fee.handling.us>`
 - (1) Contains the US handling fee
 - (2) The fee must be an integer.
 - b) `<fee.handling.intl>`
 - (1) Contains the international handling fee
 - (2) The fee must be an integer.
 - c) `<fee.media>`
 - (1) Contains the media fee for any item that is not order via FTP (push or pull)
 - (2) The fee must be an integer.
 - d) `<days.expiration>`
 - (1) Contains the number of days that the quote will be good for
 - (2) This value will be added to the day of month of the current month.

The screenshot displays the 'Provider Policies (Ordering)' configuration page. On the left is a vertical navigation menu with the following items: 'Leave Provider Context' (green), 'Provider Information', 'Provider Contacts', 'Provider Policies' (highlighted in blue), 'Provider Orders', 'Data Management', and 'User Lookup'. The main content area on the right contains several sections: 'Retry Information' with 'Retry Attempts: 1' and 'Retry Wait Time: 30'; 'Order Transactions Supported' with checkboxes for 'QUOTE', 'SUBMIT', and 'CANCEL' (all checked); 'Routing Location' with 'End Point: http://p4eil01u.ecs.nasa.gov:18102/EWOC_TS2/services/OrderFulfillmentPort' and 'Type: ORDER_FULFILLMENT_V9'; 'Order Catalog Items' with 'Order Supports Duplicate Catalog Items: No'; 'SSL Policy' with a 'Certificate' field containing a long alphanumeric string, 'SSL Enabled: No', 'Last Update: 2008-02-01T16:30:54Z', and 'Status: Not Active'; and 'Custom Properties in XML' with an empty text area. At the bottom are 'Update Policies' and 'Clear Policies' buttons. Red arrows point from annotations to specific elements: '3.7.5 a. & b.' points to 'Provider Policies' in the menu; '3.7.5 c.' points to the 'Order Transactions Supported' section; '3.7.5 d.' points to the 'Routing Location' section; '3.7.5 e.' points to the 'Order Catalog Items' section; '3.7.5 f.' points to the 'Certificate' field; '3.7.5 g.' points to the 'Custom Properties in XML' text area; '3.7.5.1' points to the 'Update Policies' button; and '3.7.5.2' points to the 'Clear Policies' button.

Leave Provider Context

Provider Policies (Ordering)

Provider Information

Provider Contacts

3.7.5 a. & b. Provider Policies

Provider Orders

Data Management

User Lookup

Retry Information

Retry Attempts: 1

Retry Wait Time: 30

Order Transactions Supported

☒ QUOTE ☒ SUBMIT ☒ CANCEL

Routing Location

End Point: http://p4eil01u.ecs.nasa.gov:18102/EWOC_TS2/services/OrderFulfillmentPort

Type: ORDER_FULFILLMENT_V9

Order Catalog Items

Order Supports Duplicate Catalog Items: No

SSL Policy

Certificate:

-----BEGIN CERTIFICATE-----
MIICtCCAh4CAQAwDQYJKoZIhvcNAQEEBQAwgalxCzAJBgNVBAYTAiVTMQsw
CQYD
VOOIEwJNRDEXMBUGA1UEBxMOVXBwZXIqTWVybGJvcn8xETAPBqNVBAoTCFJ

SSL Enabled: No Last Update: 2008-02-01T16:30:54Z Status: Not Active

Custom Properties in XML:

3.7.5 c.

3.7.5 d.

3.7.5 e.

3.7.5 f.

3.7.5 g.

3.7.5.1 Update Policies

3.7.5.2 Clear Policies

Figure 80. Provider Policies (Ordering) Screen

3.7.5.1 Update Policies

- a. To update the policies, click the "Update Policies" button.

The "Update Provider Policies (Ordering)" screen appears (see Figure 81)

3.7.5.1 b.

3.7.5.1 c.

3.7.5.1 d.

Figure 81. Update Provider Policies (Ordering) Screen

- b. Update the fields as needed. Required fields are listed below. See section 3.7.5, Provider Policies for details on all the fields.
- 1) Retry Information
 - 2) Order Transactions Supported
 - 3) Routing Location
 - 4) Order Catalog Items
- c. When done, click the "Update" button
- d. At any time, if you do not wish to update your policies, click the "Cancel" button

3.7.5.2 Clear Policies

- To clear all policies, click the "Clear Policies" button on the "Provider Policies (Ordering)" screen (see Figure 80)
- A confirmation box appears (see Figure 82)
- ; click "OK" to clear the policies or "Cancel" to cancel the clear. Note that ALL policies will be cleared.



Figure 82. Clear Policies Confirmation Screen

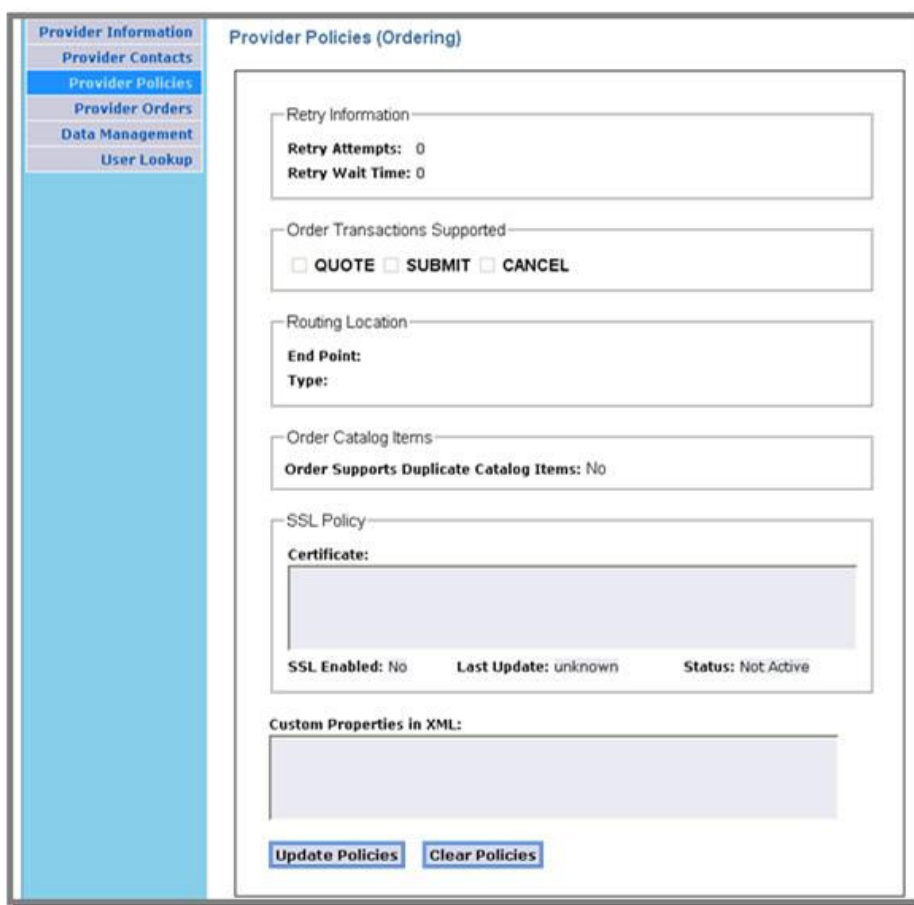


Figure 83. Provider Policies Cleared

3.7.6 Provider Order Search

This function allows a user to search for and display orders submitted to the data provider through ECHO.

There are two kinds of orders in ECHO: overall Orders (called Orders) and Provider Orders. An overall Order is submitted by a user to ECHO (Registered or Guest) and will contain items from one or more Providers. Upon submission, the overall Order is broken down into individual Provider Orders, each one containing only those items for that provider. ECHO automatically maintains creating and removing provider orders when items are added and removed from an order. The Provider Orders will be delivered to providers when the order is quoted or submitted.

Each Provider Order has a state associated with it indicating the state of this particular Provider Order. The actual state of the overall Order is calculated from the states of all Provider Orders in the overall Order. When an Order is created, each Provider Order initially has a NOT_VALIDATED state. After the user sets the options, sets user information, and successfully validates the order, the provider order state becomes VALIDATED.

The Provider Order may be quoted before submitting, if quoting is supported by the provider.

Un-submitted Provider Orders may have the following states: NOT_VALIDATED, VALIDATED, QUOTING, QUOTED, QUOTED_WITH_EXCEPTIONS.

3.7.6.1 Order Search Fields

Orders can be found by specifying a particular order GUID (unique id assigned by ECHO for each order) or by setting up search filters. The following are the available criteria to use for retrieving one or more orders:

a. Order GUID

The unique ID assigned by ECHO of the order to which the overall Order or Provider Order belongs

b. User ID (User Name)

The User Name of the user who owns this order. This field will be null for orders owned by a Guest user.

c. Date Range of the creation, submission or last update date

- 1) Creation Date of order (GMT)
- 2) Submission Date of order (GMT)
- 3) Date (GMT) the order was last updated either:
 - a) State update or
 - b) By the provider (GMT)

d. Order States

- 1) NOT_VALIDATED

The order has not yet been validated to ensure that all the information in the order is correct.

- 2) VALIDATED

The order has been validated and all the information in the order is correct. It is important to note that although an order may be in the validated state, if a provider modifies the underlying data being ordered, an order may no longer be valid.

- 3) QUOTING

The order has been sent to the provider for quoting and the provider has not yet responded.

- 4) QUOTED

The order was sent to the provider for a quote and the provider has delivered the quote.

5) QUOTED_WITH_EXCEPTIONS

The order was sent to the provider for a quote and the provider has delivered the quote however some part of the order could not be quoted. This is most likely because one of the providers in the order does not support quoting.

6) SUBMITTING

The order was submitted to the provider and the provider has not yet accepted the order.

7) SUBMITTED_WITH_EXCEPTIONS

The order was submitted to the providers and only some of the providers have accepted the order.

8) PROCESSING

The order has been accepted by all providers and it is being filled.

9) PROCESSING_WITH_EXCEPTIONS

The order has been accepted by all providers however, one or more providers have found a problem with the order.

10) CANCELLING

A cancel request has been sent to the provider but the provider has not accepted the request yet.

11) CANCELLED

The provider has accepted a cancel request or the provider has cancelled the order directly.

12) CLOSED

The order has been filled and is now complete.

13) CLOSED_WITH_EXCEPTIONS

The order has been filled and is now complete however, one or more of the providers encountered problems completing the order.

3.7.6.2 Performing an Order Search

- a. To perform the search, first click on the "Provider Orders" link on the left navigation panel of the "Provider Context" tab.

The "Provider Order Search" screen appears (see Figure 84).

The screenshot shows the 'Provider Order Search' interface. On the left is a sidebar with a menu: 'Provider Information', 'Provider Contacts', 'Provider Policies', 'Provider Orders' (highlighted in blue), 'Data Management', and 'User Lookup'. The main area is titled 'Provider Order Search' and contains the following fields and controls:

- 'Order GUID:' followed by a text input field. A red arrow points to this field with the label '3.7.6.2 b.1)'.
- 'Or, specify one or more filters...' text.
- 'Filter by Order States:' followed by a dropdown menu. The dropdown is open, showing options: 'validated', 'not_validated', 'quoting', 'quote_rejected', and 'quote_failed'. A red arrow points to the dropdown with the label '3.7.6.2 b.2)b)'. To the right of the dropdown, text reads 'Selecting no states implies all states.'
- 'Filter by User ID:' followed by a text input field. A red arrow points to this field with the label '3.7.6.2 b.2)a)'.
- 'Filter by Date/Time of:' followed by a dropdown menu. A red arrow points to this dropdown with the label '3.7.6.2 c.'.
- A 'Display Orders' button at the bottom left.

Below the screenshot, a red text label reads 'Required if Order GUID not specified'.

Figure 84. Provider Order Search Screen

- b. Fill in the criteria desired for the search. You may search in two basic ways:

Note: While entering search criteria, if you do not wish to continue with the order search, simply navigate away from the page (there is no "Cancel" button on this page.)

1) Specify Order GUID only

This search will retrieve just the order you are looking for and is the fast and most efficient way to find an order. However, you must know the Order GUID. When an Order GUID is used, no other filters/search criteria are needed.

Note that if you enter an Order GUID, all other filters/criteria are ignored.

2) Use the other filter criteria (without Order GUID specified)

If you are not using an Order GUID for your search, you must use a date, regardless of other criteria used. When specifying the date, you will need to specify which date to use and a beginning and ending date within a 1-week window.

a) Select the type of date search (Creation, Submission, Last Update)

b) Next, enter the beginning (From) and end (To) dates to search. This date range may be no longer than one week

c) The other fields are optional (Filter by Order States and Filter by User ID)

- (1) User ID (User Name) will further filter the results by only retrieving those orders within the specified date range and with the specified User ID (User Name). If no User ID is specified, all orders for all users within the date range will be retrieved.

Provider Order Search

Order GUID: ← 3.7.6.2 b.1)

Or, specify one or more filters...

Filter by Order States:

validated
not_validated
quoting
quote_rejected
quote_failed

 Selecting no states implies all states.

Filter by User ID:

Filter by Date/Time of:

Display Orders ← 3.7.6.2 c.

Figure 85. GUID Order Search

- (2) Order States will further filter the results by only retrieving those orders within the specified date range and with the specified order state (see section 3.7.6.1). If no Order State is specified, all orders for all states within the date range will be retrieved.

If you leave the "Filter by Order States" field empty, PUMP will return all states in ECHO matching the other criteria for the provider.

Provider Order Search

Order GUID:

Or, specify one or more filters...

Filter by Order States:

validated
not_validated
quoting
quote_rejected
quote_failed

 Selecting no states implies all states. ← 3.7.6.2 b.2)c)2)

Filter by User ID: ← 3.7.6.2 b.2)c)1)

Filter by Date/Time of: ← 3.7.6.2 b.2)a)

From (YYYY - MM - DD hh : mm : ss) 2008 - 02 - 10 00 : 00 : 00 ← 3.7.6.2 b.2)b)

To (YYYY - MM - DD hh : mm : ss) 2008 - 02 - 16 00 : 00 : 00 ← 3.7.6.2 b.2)b)

Display Orders ← 3.7.6.2 c.

Figure 86. Non-GUID Order Search

- c. Click the "Display Orders" button when done specifying your criteria.
- 1) When the result is returned, a user may sort by any of the fields displayed by clicking on the header of the Orders Table. Headings:
 - a) State—Order's current state
 - b) Created—Date the order was created
 - c) Submitted—Date the order was actually submitted by the user for fulfillment
 - d) Updated—Date the order's state was last updated
 - e) User ID—User name of the owner of the order
 - f) Contact Name—Name of the order's contact person
 - 2) The user may choose to:
 - a) View order information (section 3.7.6.4) or
 - b) Manage/update the provider order (section 0)
 - 3) When done, click the "Cancel" button to exit the "Orders" screen

State	Created	Submitted	Updated	User ID	Contact Name	
PROCESSING	2008-02-14 11:48:29	2008-02-14 11:49:59	2008-02-14 11:50:00	emdts2	Seong Lee	<div>View View Provider Order</div>

Cancel

Figure 87. Order GUID Search Results

Orders						
State	Created	Submitted	Updated	User ID	Contact Name	
SUBMITTED_WITH_EXCEPTIONS	2008-02-12 15:29:56	2008-02-12 15:31:31	2008-02-12 15:31:32	emds2	Seong Lee	View View Provider Order
CLOSED	2008-02-12 15:36:26	2008-02-12 15:37:05	2008-02-14 11:31:40	emds2	Seong Lee	View View Provider Order
SUBMITTED_WITH_EXCEPTIONS	2008-02-12 16:50:30	2008-02-12 16:50:59	2008-02-12 16:51:00	emds2	Seong Lee	View View Provider Order
CLOSED	2008-02-13 14:32:56	2008-02-13 14:33:37	2008-02-14 11:28:14	emds2	Seong Lee	View View Provider Order
SUBMITTED_WITH_EXCEPTIONS	2008-02-14 10:52:23	2008-02-14 11:01:17	2008-02-14 11:01:19	emds2	Seong Lee	View View Provider Order
CLOSED	2008-02-14 11:04:17	2008-02-14 11:37:37	2008-02-14 11:39:18	emds2	Seong Lee	View View Provider Order
CLOSED	2008-02-14 11:40:32	2008-02-14 11:40:55	2008-02-14 11:43:19	emds2	Seong Lee	View View Provider Order
PROCESSING	2008-02-14 11:48:29	2008-02-14 11:49:59	2008-02-14 11:50:00	emds2	Seong Lee	View View Provider Order
PROCESSING	2008-02-14 12:02:44	2008-02-14 12:09:14	2008-02-14 12:09:17	emds2	Seong Lee	View View Provider Order
PROCESSING	2008-02-14 12:23:20	2008-02-14 15:40:41	2008-02-14 15:40:43	emds2	Seong Lee	View View Provider Order
CLOSED	2008-02-14 16:11:54	2008-02-14 16:12:17	2008-02-14 16:15:40	emds2	Seong Lee	View View Provider Order
CLOSED	2008-02-14 16:16:54	2008-02-14 16:18:55	2008-02-14 16:23:22	emds2	Seong Lee	View View Provider Order

[Cancel](#)

Figure 88. Non-Order GUID Search Results

3.7.6.3 Search Errors



Figure 89. Order GUID Not Found

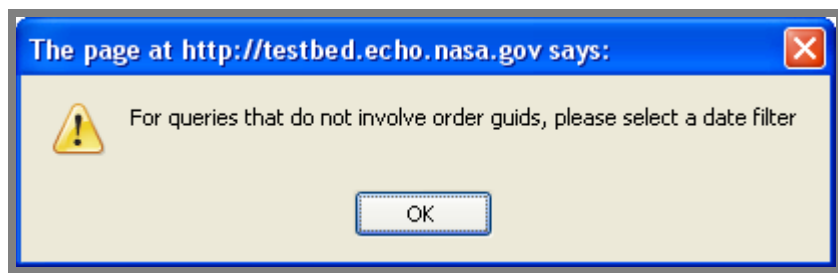


Figure 90. Missing Order GUID and Date Filter

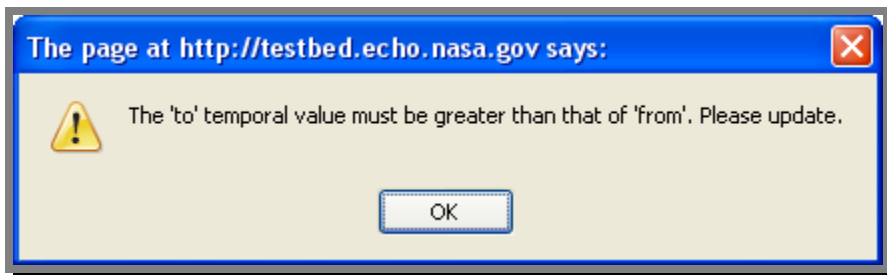


Figure 91. Ending (To) Date Before Beginning (From) Date

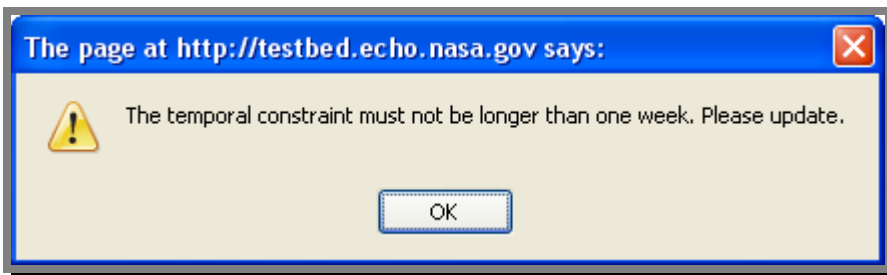


Figure 92. Date Range Greater Than One Week

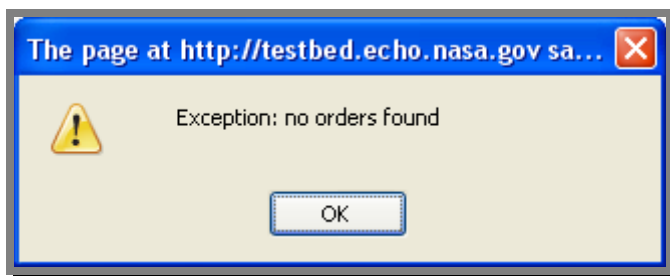


Figure 93. No Orders Found

3.7.6.4 View Provider Order Information

This view gives you an overview of the information set for the order. Information includes:

Order Information:	Contact Information:	Billing Information	Shipping Information
<ul style="list-style-type: none"> Order GUID Order State Price, if known Creation Date Submission Date Last Update Date User Name of Owner Notification Level setting User Domain User Region Client Used to submit order 	<ul style="list-style-type: none"> Contact's Role in the Organization Contact's Name Organization Name Contact's Address Contact's Phone Number(s) Contact's Email Address 	<ul style="list-style-type: none"> Billing Contact's Role in the Organization Billing Contact's Name Organization Name Billing Contact's Address Billing Contact's Phone Number(s) Billing Contact's Email Address 	<ul style="list-style-type: none"> Shipping Contact's Role in the Organization Shipping Contact's Name Organization Name Shipping Contact's Address Shipping Contact's Phone Number(s) Shipping Contact's Email Address

From this screen, you may:

- a. View the Provider Order (Manage/Update the Provider Order)
- b. Cancel (return to the "Orders" screen)

Order Information

Order GUID:	1D2FFC50-F949-EF9B-A986-9BE3B43745C4
State:	PROCESSING
Price:	0.0
Created:	2008-02-14 11:48:29
Submitted:	2008-02-14 11:49:59
Updated:	2008-02-14 11:50:00
Owner:	emds2
Notification Level:	VERBOSE
User Domain:	OTHER
User Region:	USA
Client Identity:	WIST-10.0.0

Contact Information

Role:	Contact
Name:	Seong Lee
Organization:	
Address:	- Contact - 5700 rivertech ct Riverdale MD 20737 United States
Phone:	3018518297 (BUSINESS)
Email:	seong_lee@raytheon.com

Shipping Information

Role:	Shipping
Name:	Seong Lee
Organization:	
Address:	- Shipping - 5700 rivertech ct Riverdale MD 20737 United States
Phone:	3018518297 (BUSINESS)
Email:	seong_lee@raytheon.com

Billing Information

Role:	Billing
Name:	Seong Lee
Organization:	
Address:	- Billing - 5700 rivertech ct Riverdale MD 20737 United States
Phone:	3018518297 (BUSINESS)
Email:	seong_lee@raytheon.com

View Provider Order **Cancel**

3.7.6.4 a.)

3.7.6.4 b.)

3.7.6.4)

Figure 94. View Order

3.7.6.5 Manage/Update the Provider Order (View Provider Order)

This function displays the following information. Of this information, the following may be updated:

Leave Provider Context

Provider Order

Order Guid: F1FB1D43-D5EC-50B7-5FFC-C32D9DE4E32F
Provider Guid: 8CD20804-6855-2E54-9678-B0FF9B3FA1DB
Tracking ID: 0800029129 **Edit**
Provider Order State: PROCESSING
Closed Date:

Catalog Items

Catalog Items: G1007-AETDTS2 (CLOSED)
G1013-AETDTS2 (CLOSED)
G1019-AETDTS2 (NOT_SET)
Dispose

Status Messages

Messages: Thu Feb 14 12:09:14 EST 2008 : ECHO: Transitioning from state [NOT_VALIDATED] to state [VALIDATED]
Thu Feb 14 12:09:14 EST 2008 : ECHO: Transitioning from state [VALIDATED] to state [SUBMITTING]
Thu Feb 14 12:09:17 EST 2008 : Order received
Thu Feb 14 12:09:17 EST 2008 : ECHO: Transitioning from state [SUBMITTING] to state [PROCESSING]
Thu Feb 14 12:11:23 EST 2008 : Shipped
Thu Feb 14 12:11:38 EST 2008 : Shipped
Add

Quote

(None)

Receipt

Acceptance Date: 2008-02-14
Estimated Ship Date: 2008-02-14
Latest Cancel Date: 2008-02-14
Total Price: 0.0
Data Price: 0.0
Media Price: 0.0
Shipping Fee: 0.0
Handling Fee: 0.0
Discount: 0.0
Media Quantity: 0
Additional Information:
Cancel

3.7.6.5 d. 3.7.6.5 c. 3.7.6.5 b. 3.7.6.5 a.

Figure 95. Update Order

a. Tracking ID of the Provider Order

- 1) Click the "Edit" button next to the "Tracking ID" (Figure 95)

The "Edit Tracking ID" screen appears

Edit Tracking Id

Enter a new tracking ID for order: 1D2FFC50-F949-EF9B-A986-98E3B43745C4.

* Tracking ID: 0800029128

* (Required Field)

Update **Cancel**

3.7.6.5 a.2)

3.7.6.5 a.3)

3.7.6.5 a.4)

Figure 96. Edit Tracking ID

- 2) In the "Tracking ID" field, enter the new Tracking ID
- 3) When done, click the "Update" button (no confirmation dialog)
- 4) To cancel, click the "Cancel" button

b. Close/Cancel a Catalog Item from the Order

You may close or cancel specific catalog line items if they are open and are part of an open order. If you are allowed to close/cancel catalog items, the "Dispose" button will be displayed in the "Catalog Items" area.

Note that if all the order line items are closed or cancelled, the whole provider order will be automatically closed

- 1) Click the "Dispose" button (Figure 95)

The "Dispose Provider Order Catalog Items" screen appears

Dispose Provider Order Catalog Items

Order Guid: 1D2FFC50-F949-EF9B-A986-98E3B43745C4

Provider Guid: 8CD20804-6855-2E54-9678-B0FF9B3FA1DB

* Catalog Items: G1006-AETDTS2

Note that selecting all the items affects the entire provider order.

* Status Message:

* (Required Field)

Cancel Items **Close Items** **Cancel**

3.7.6.5 b.8)

3.7.6.5 b.5)

3.7.6.5 b.6)

3.7.6.5 b.4)

3.7.6.5 b.3)

3.7.6.5 b.2)

Figure 97. Dispose Provider Order Catalog Items

- 2) The following information appears:
 - a) Order GUID
 - b) Provider GUID
 - c) List of Catalog Items in the Order along with their fulfillment states, if any
 - d) Status Messages

- 3) Select the catalog item(s) to be closed/cancelled

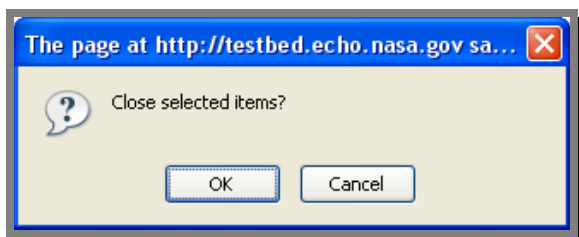
Note that if you select all the items, the entire order is affected.

- 4) Add a message in the "Status Message" box. The status message is required.



Figure 98. Status Message Missing

- 5) If closing the items, click the "Close Items" button
- 6) If cancelling the item, click the "Cancel Items" button
- 7) You will be asked to confirm the action taken



OR

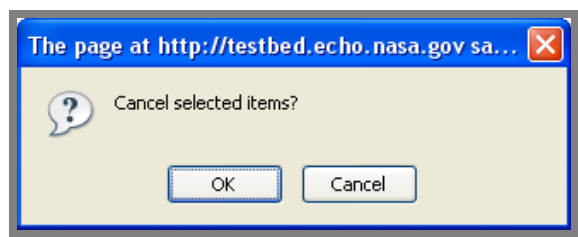


Figure 99. Confirm Close/Cancel Catalog Item

- 8) If you decide not to do anything, click the "Cancel" button

c. Add Status Message

Providers may enter messages to indicate the status of orders. The message is a free-form text field.

- 1) Click the "Add" button in the "Status Message" area (Figure 95)

The "Add Status Message" screen appears

Add Status Message

Enter a new status message for order: F1FB1D43-D5EC-50B7-5FFC-C32D9DE4E32F.

* **Status Message:**

* (Required Field)

3.7.6.5 c.3 3.7.6.5 c.5 3.7.6.5 c.2

Figure 100. Add Status Message

- 2) Enter the status message in the "Status Message" field. This is a required field.

- 3) When done, click the "Add" button.
- 4) A confirmation dialog box appears



Figure 101. Confirm Add Status Message

- a) Click "OK" to continue the add
 - b) Click the "Cancel" button to cancel the add.
- 5) At any time prior to clicking the "Add" button, you may cancel by clicking the "Cancel" button
- d. Cancel**—at anytime, to cancel, click the "Cancel" button (Figure 95)

3.7.7 Data Management

To get to "Data Management", click the "Data Management" on the left navigation panel under the "Provider Context" tab. The default view is the "Rules" view (see Figure 102 or Figure 104).

3.7.7.1 Rules

To get to the Rules, select the "Rules" link under "Data Management" on the left navigation panel.

Rules are the mechanism used to control access to metadata. They restrict users from performing certain actions or they may permit users to take certain actions on the provider's metadata. Actions currently include viewing, browsing, and ordering metadata.

The building blocks are called Conditions. Conditions are used to specify characteristics of metadata. For example: 30 days old, the month of September, aFlag2 value 3. Conditions become powerful when they are combined with a Comparator, Action, and Data Holding.

There are four types of rules and are identified by their conditions:

- **Boolean.** Boolean rules are basic data access rules and are used if you do not want one of the other conditions. Creating a rule with a Boolean condition sets the condition value to TRUE. If the flag is false, then the rule will not be applied. Boolean conditions can only be used with the "equals" comparator.
- **Restriction Flag.** Restriction Flag rules restrict access to collections or granules based on the value of a **RestrictionFlag** metadata field. The field "Lower" in the Restriction Flag condition indicates a value for the restriction flag field in the metadata. Comparator options include "equals", "not equals", "greater than", "greater than or equal", "less than", or "less than or equal". Restriction flag values are integers.
- **Temporal.** Temporal rules are based on time fields in the metadata. This rule uses a date range, so that a date associated with a granule can be compared against the date range (start time and end time) to check for the applicability of the condition. The fields **Production date**, **Acquisition date**, **Insert date**, and **Last update date** can be used for Temporal conditions but only with the "equals" and "not equals" comparators.
- **Rolling Temporal.** Rolling Temporal rules are base on time fields in the metadata. This rule specifies an amount of time after the current time and uses the same fields as Temporal. Rolling temporal can only be used with the "greater than", "greater than or equal", "less than", and "less than or equal" comparators.

If a rule is a restriction, it applies to the entire ECHO populace.

If a rule is a permission, it applies only to members of the group specified.



Figure 102. Rules Screen, No Rules Defined

The screenshot shows a window titled "Rules" with a table containing one rule. The table has columns for Name, Description, and Summary. The rule is named "ALLOW" and has a description "ALLOW orders". The summary section lists various attributes: Rule Type: PERMISSION, Action Type: ORDER, Group Names: (none), Catalog Item Type: COLLECTION, Catalog Items: (all), Condition Type: BOOLEAN, Comparator: EQUALS, and Value: TRUE. To the right of the summary are "View" and "Delete" buttons. Below the table, there is a section "Add a new rule." with a "Condition Type" dropdown set to "boolean" and an "Add" button.

Name	Description	Summary
ALLOW	ALLOW orders	Rule Type: PERMISSION Action Type: ORDER Group Names: (none) Catalog Item Type: COLLECTION Catalog Items: (all) Condition Type: BOOLEAN Comparator: EQUALS Value: TRUE

Add a new rule.
Condition Type: boolean Add

Figure 103. Rules Screen, Permission & Boolean Rule Defined

The screenshot shows a window titled "Rules" with a table containing one rule. The table has columns for Name, Description, and Summary. The rule is named "AIRS-L2-Pv5" and has a description "restrict viewing of AIRS L2 Prodv5 metadata less than 30 days old". The summary section lists various attributes: Rule Type: RESTRICTION, Action Type: VIEW, Group Names: (none), Catalog Item Type: COLLECTION, Catalog Item: AIRS Level 2 Support Product V005, Condition Type: ROLLING TEMPORAL, Comparator: LESS_THAN_OR_EQUAL, Duration: 30 days, and Target: LAST_UPDATE. To the right of the summary are "View" and "Delete" buttons. Below the table, there is a section "Add a new rule." with a "Condition Type" dropdown set to "boolean" and an "Add" button. Red arrows point from labels below to specific elements: "3.7.7.1 b.1)" points to the "Add" button, "3.7.7.1 b.2)" points to the "Condition Type" dropdown, "3.7.7.1 a." points to the "View" button, and "3.7.7.1 c." points to the "Delete" button.

Name	Description	Summary
AIRS-L2-Pv5	restrict viewing of AIRS L2 Prodv5 metadata less than 30 days old	Rule Type: RESTRICTION Action Type: VIEW Group Names: (none) Catalog Item Type: COLLECTION Catalog Item: AIRS Level 2 Support Product V005 Condition Type: ROLLING TEMPORAL Comparator: LESS_THAN_OR_EQUAL Duration: 30 days Target: LAST_UPDATE

Add a new rule.
Condition Type: boolean Add

3.7.7.1 b.1) 3.7.7.1 b.2) 3.7.7.1 a. 3.7.7.1 c.

Figure 104. Rules Screen, Restriction & Rolling Temporal Rule Defined

Figure 104 above shows a sample rule to "restrict viewing of all MODIS metadata less than 30 days old":

Condition: 30 days old;
Comparator: less than;
Action: view;
Data Holding: instrument MODIS.

a. **View a rule.** To view a rule, on the "Rules" screen (Figure 104):

- 1) Click the "View" button next to the rule you wish to view.

The "Rule" screen appears (note the singular "Rule" in the screen title rather than the plural used on the previous screen) (see Figure 105)

- 2) Click the "Cancel" button to return to the "Rules" screen

Figure 105. View Rule Screen

- b. **Add a New Rule.** To add a new rule, on the "Rules" screen (see Figure 102 or Figure 104):
- 1) Select the type of rule you wish to add (Boolean, Temporal, Rolling Temporal, Restriction Flag)
 - 2) Click the "Add Rule" box
- The "New <type> Rule" screen appears. (<type> will be the type of rule you chose to add) (see Figure 108)

Figure 106. Add New Rule Screens

New Rolling Temporal Rule

* Rule Name:

* Description:

* Rule Type:

* Action Type:

* Catalog Item Type:

Group(s):

* Comparator:

* Duration Value:

* Temporal Type:

* (Required Field)

New Rolling Temporal Rule

* Rule Name:

* Description:

* Rule Type:

* Action Type:

* Catalog Item Type:

Collection(s):

* Comparator:

* Duration Value:

* Temporal Type:

* (Required Field)

Figure 107. New Rolling Temporal Rule

- 3) Based on the type of rule you selected and the criteria set for the rule, fill in the fields to setup your rule. Note the fields with an asterisk (*) are required. The required fields will also vary depending on the rule type and criteria.
- 4) Click the "Cancel" button if you do not wish to add the rule
- 5) Click the "Add" button to add the rule
- 6) Data validation will take place against the values you entered. If there is an error, an error message will be displayed. Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation.



Figure 108. New Boolean Rule Screen

- c. **Delete a rule.** To delete a rule, on the "Rules" screen (see Figure 102 or Figure 104):
- 1) Click the "Delete" button next to the rule you wish to delete
 - 2) A delete confirmation screen appears (see Figure 109). Click "OK" to continue the deletion or "Cancel" to cancel the deletion

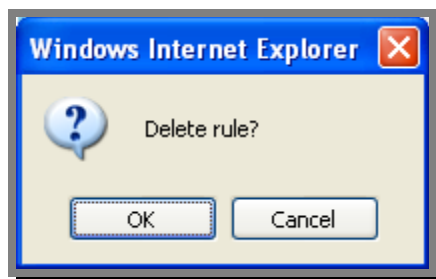


Figure 109. Delete Rule Confirmation Box

3.7.7.2 Visibility

A collection can be set to be restricted from viewing, browsing, and ordering by all users except those acting on behalf of the provider who owns the collection. To do this function, set the collection's visibility flag to 'RESTRICT'. This restriction can be removed by changing the visibility flag to 'OPEN'. The restriction applied on the collection will also be applied on all its granules. Note that data rules apply only to 'OPEN' datasets; restricted datasets are not visible and hence no data rules will be applied.

To view the visibility of one or more collections:

- a. Select the "Visibility" link under "Data Management" on the left navigation panel (see Figure 102 or Figure 104).
- b. A list of collections is displayed (see Figure 110).

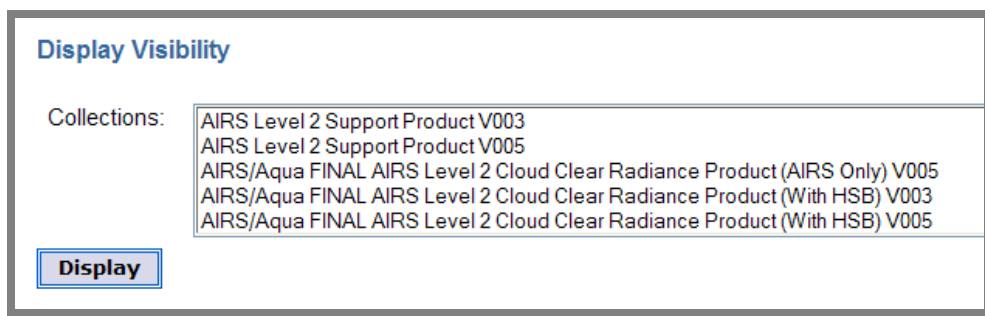


Figure 110. List of Collections to Select From

- c. Select the collection(s) you wish to view the visibility for
 - 1) If no collections are selected, then all collections will be displayed

- d. Click the "Display" button
- e. The "Visibility" screen appears (see Figure 111)

Collection	Visibility Flag
AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (AIRS Only) V005	OPEN
AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (With HSB) V005	OPEN

Modify Cancel

Figure 111. List of Selected Collections Screen

- 1) Click the "Cancel" button to return to the previous screen with no changes.
- 2) To modify the visibility of one or more of the displayed collections, click the "Modify" button
- 3) The "Set Visibility" screen appears (see Figure 112 and Figure 113)

Set Visibility

Open Collections

AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (AIRS Only) V005
AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (With HSB) V003

Select one or more collections to restrict. Restrict

Cancel

Figure 112. Set Visibility Screen, All the Same Setting

Set Visibility

Open Collections

AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (AIRS Only) V005

Select one or more collections to restrict. Restrict

Restricted Collections

AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (With HSB) V003

Select one or more collections to open. Open

Cancel

Figure 113. Set Visibility Screen, Mixed Settings

- 4) Select one or more collections and click the "Restrict" or "Open" button
- 5) One of the visibility change confirmation boxes appears (see Figure 114)
- 6) Click "OK" to continue or "Cancel" to cancel the modification.

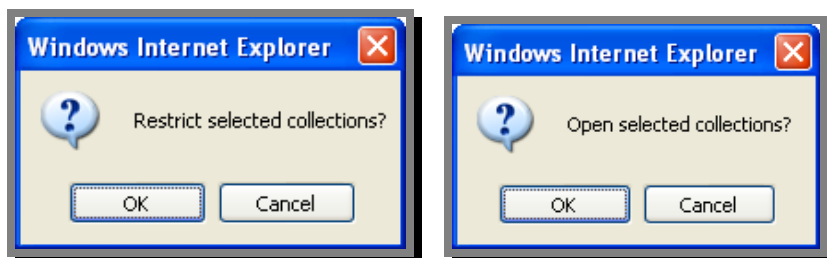


Figure 114. Confirm Change of Visibility

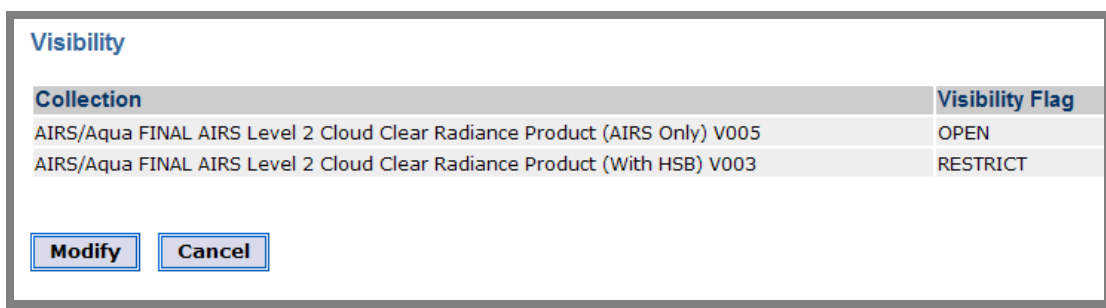


Figure 115. Modified Visibility...Mix of Open and Restricted

3.7.7.3 Reports/Rules Search

The Data Management reports provide a way for providers to view their rules based on which rules they wish to see. The default is "All Rules". To get to the "Rules Search" screen, select the "Reports" link under "Data Management" on the left navigation panel under the "Provider Context" tab (see Figure 116).

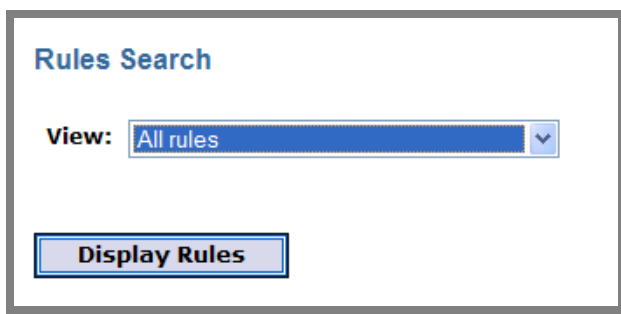


Figure 116. Rules Search Screen

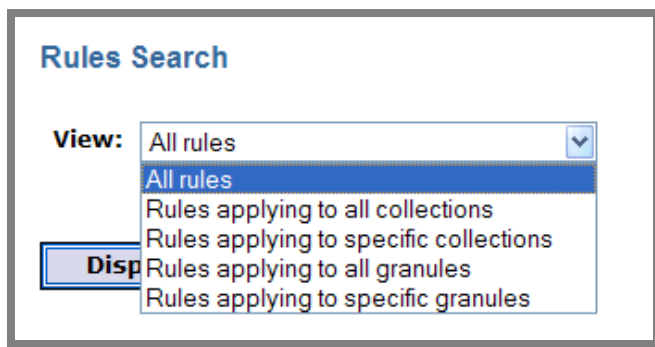


Figure 117. Select Which Rules to Report

To select which rules to view/report:

- Click the "View" arrow to see the drop down list
- Select the rules you wish to view/report
- Click the "Display Rules" button
- The "Rules Report" screen appears (see Figure 118) showing all the rules that match the specified criteria.
- Click the "Cancel" button to return

Rules Report

Name	Description	Details
AIRS-L2-Pv5	restrict viewing of AIRS L2 Prodv5 metadata less than 30 days old	<p>Rule Type: RESTRICTION</p> <p>Action Type: VIEW</p> <p>Group Names: (none)</p> <p>Catalog Item Type: COLLECTION</p> <p>Catalog Item: AIRS Level 2 Support Product V005</p> <p>Condition Type: ROLLING TEMPORAL</p> <p>Comparator: LESS_THAN_OR_EQUAL</p> <p>Duration: 30 days</p> <p>Target: LAST_UPDATE</p>

Figure 118. Rules Report

3.7.7.4 Option Definitions

Order options allow Data Providers to configure a block of custom provider policies that will define the information that a client must provide as part of an order, as well as other settings such as communications and firewall rules. These options include the delivery method, file format, and other order options. More than one option can be specified at a time in a definition, but the definitions will be applied at the collection level. For example, if a collection only can be delivered via FTP Push, the provider should define a rule that contains only that delivery option.

Order Options use ECHO Forms (refer to http://www.echo.nasa.gov/data_partners/data_tools10.shtml for more information) for providers to indicate additional information required from users in order to fulfill their orders, such as the media to put the ordered data on and the specific subset of the data to order. Providers assign Order Option definitions to catalog items. When an order item is added to an order that has required order options, it must contain an option selection that corresponds to one of the assigned option definitions for the catalog item being ordered. These definitions are managed from this screen. *See section 1.3 of the ECHO Forms Specification for more details about ECHO Forms.*

Option Definitions

Name	Scope	Deprecated	
ECHO_SYSTEM_OPTIONS_V1	SYSTEM	false	<input type="button" value="View"/>
ECHO_SYSTEM_OPTIONS_V2	SYSTEM	false	<input type="button" value="View"/>
swath	PROVIDER	false	<input type="button" value="View"/> <input type="button" value="Deprecate"/> <input type="button" value="Delete"/>

Figure 119. Options Definition Screen (View)

As previously mentioned, when specifying these options, ECHO forms XML must be used. A sample form that contains ordering options for SAR data can be found at:
http://www.echo.nasa.gov/data_partners/data_docs/asf_frame_v2.xml.

If "Deprecated" is set to true, it means that the provider no longer supports this option. Any open orders will be filled with that option, but it cannot be used for new orders.

Only ECHO Administrators can "Deprecate" and "Delete" the SYSTEM Scope Option Definitions.

To get to "Option Definitions", click the "Option Definitions" link under "Data Management" in the left navigation bar under the "Provider Context" tab.

The "Option Definitions" screen appears (see Figure 119) with a list of all the option definitions for the provider. Note that if the user is not an Administrator, the option definitions with a SYSTEM scope may be viewed but may not be deprecated or deleted.

For more in-depth information on creating order options, see the *ECHO 10 Data Partner User Guide*.

a. **View Option Definition.** To view an option definition:

- 1) Click the "View" button next to the option definition you wish to view on the "Option Definitions" screen
- 2) The "Option Definition" screen appears with the description of the definition (see Figure 120).
- 3) Click the "Cancel" button to return

The screenshot shows a web application window titled "Option Definition". It contains the following fields:

- Name:** Option1
- Scope:** PROVIDER
- Form:** A text area containing XML code:

```
<form xmlns="http://echo.nasa.gov/v9/echoforms" xmlns:xsc="http://www.w3.org/2001/XMLSchema" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://echo.nasa.gov/v9/echoforms echoforms.xsd">
  <model>
    <instance>
      <ecs:options xmlns:ecs="http://ecs.nasa.gov/options" xmlns:lpdac="http://lpdac.usgs.gov/orderoptions">
        <!--Default distribution method is FTP Pull; DVD is also available-->
        <ecs:distribution>
          <ecs:mediatype>
            <ecs:value>FTP Pull</ecs:value>
          </ecs:mediatype>
          <ecs:mediaformat>
            <ecs:ftpformat>
              <ecs:value>FILEFORMAT</ecs:value>
            </ecs:ftpformat>
            <ecs:dvdformat>
              <ecs:value>RockRidge</ecs:value>
            </ecs:dvdformat>
          </ecs:mediaformat>
        </ecs:distribution>
      </ecs:options>
    </instance>
  </model>
</form>
```
- Deprecated:** false
- Description:** ASTER Distribution Options
- Sort Key:** 1

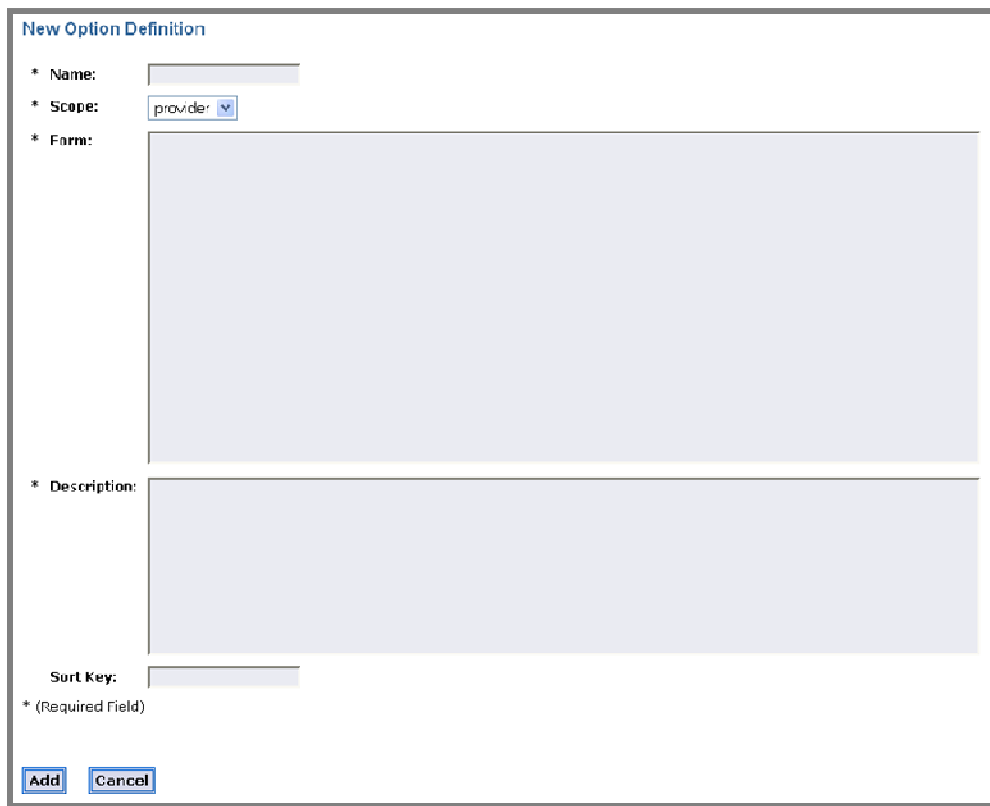
At the bottom left, there is a "Cancel" button.

Figure 120. View Option Definition

b. **Add Option Definition.** To add a new option definition:

- 1) Click the "Add New Option Definition" button at the bottom of the Option Definition list.
- 2) The "New Option Definition" screen appears (see Figure 121).
- 3) Click the "Cancel" button at any time to cancel the add operation
- 4) All fields are required when defining an Option Definition
- 5) When done, click the "Add" button

- 6) Data validation will take place against the values you entered. If there is an error, an error message will be displayed (see Figure 122). Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation



The "New Option Definition" dialog box contains the following fields and controls:

- Name:** A text input field.
- Scope:** A dropdown menu with "provider" selected.
- Form:** A large, empty text area for defining the form structure.
- Description:** A text input field.
- Sort Key:** A text input field.
- Buttons:** "Add" and "Cancel" buttons at the bottom left.
- Legend:** A note at the bottom left states "* (Required Field)".

Figure 121. Add a New Option Definition

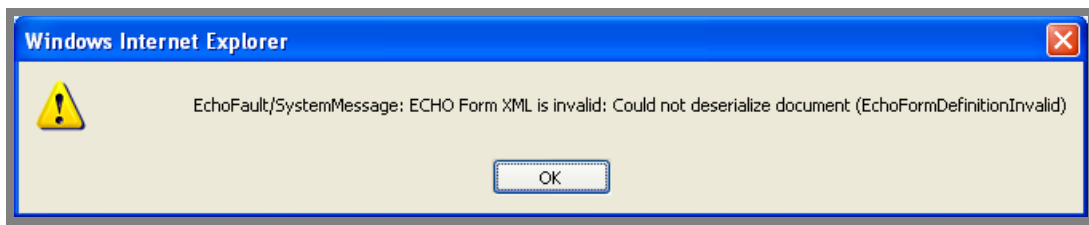


Figure 122. Invalid Forms XML

- c. **Deprecate Option Definition.** This operation works to either deprecate (mark obsolete) or undepricate an option definition. To deprecate an option definition:
 - 1) Click the "Deprecate" button next to the option definition that you wish to deprecate.
 - 2) The "Deprecate Option Definition?" confirmation box appears. (see Figure 123 and Figure 124).

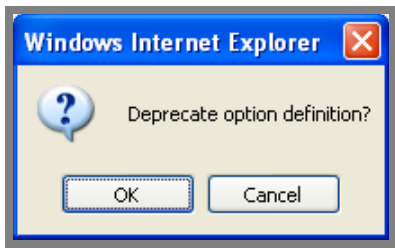


Figure 123. Deprecate Option Definition Confirmation Box

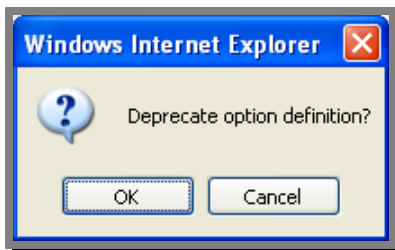


Figure 124. Undeprecate Option Definition Confirmation Box

- 3) Click the "Cancel" button to cancel the operation
 - 4) Click the "OK" button to continue with the operation and return to the option definition list
 - a) If the operation was to deprecate, the "Deprecated" column now says "true" for the option definition
 - b) If the operation was to "undeprecate", the "Deprecated" column now says "false" for the option definition
- d. **Delete Option Definition.** To delete an option definition:
- 1) Click the "Delete" button next to the option definition that you wish to delete.
 - 2) The "Delete Option Definition?" confirmation box appears. (see Figure 125).
 - 3) Click the "Cancel" button to cancel the operation
 - 4) Click the "OK" button to continue with the operation and return to the option definition list

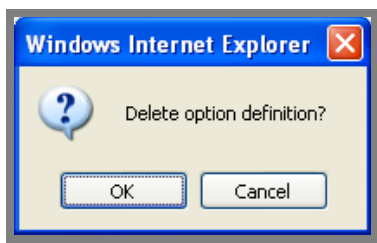


Figure 125. Delete Option Definition Confirmation Box

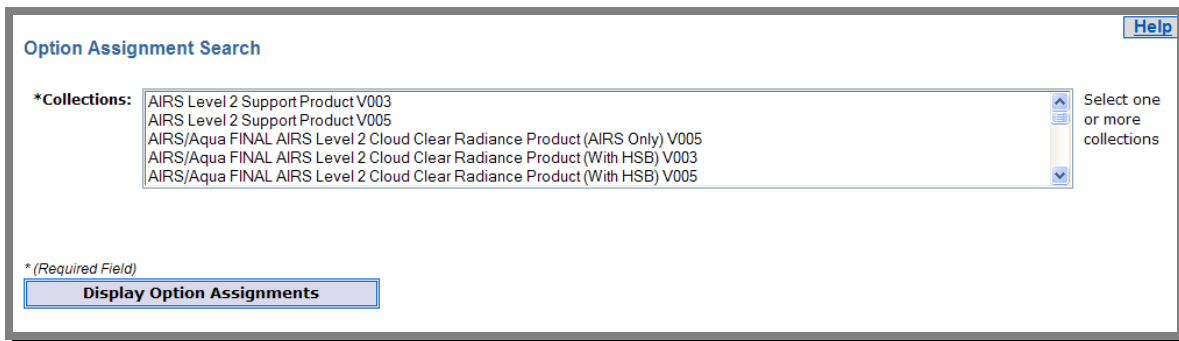
3.7.7.5 Option Assignments

Option Assignments are set at the collection level. After creating the option definitions, you must assign them to collections. The assignments specify the ordering options available for a specific collection (see Option Definitions). If more than one collection is available via FTP Push only, you can apply that rule to all collections for which it is true, but the assignments must be made one at a time.

To get to "Option Assignments", click the "Option Assignments" link under "Data Management" in the left navigation bar under the "Provider Context" tab.

The "Option Assignments" screen appears (see Figure 126) with a list of all the collections for the provider.

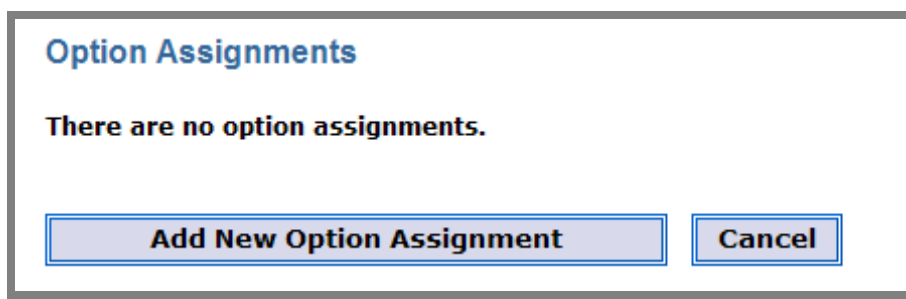
- a. **View/Display Option Assignments.** To display an option assignment:
- 1) Select one or more collections and click the "Display Option Assignments" button
 - 2) The "Option Assignment Search" screen appears (see Figure 126)



The screenshot shows the 'Option Assignment Search' window. It has a title bar with a 'Help' button. Below the title is a section labeled '*Collections:' followed by a list box containing five items: 'AIRS Level 2 Support Product V003', 'AIRS Level 2 Support Product V005', 'AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (AIRS Only) V005', 'AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (With HSB) V003', and 'AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (With HSB) V005'. To the right of the list box is a vertical scrollbar and the text 'Select one or more collections'. Below the list box is a button labeled 'Display Option Assignments'. At the bottom left, there is a note '* (Required Field)'.

Figure 126. Option Assignment Search Screen

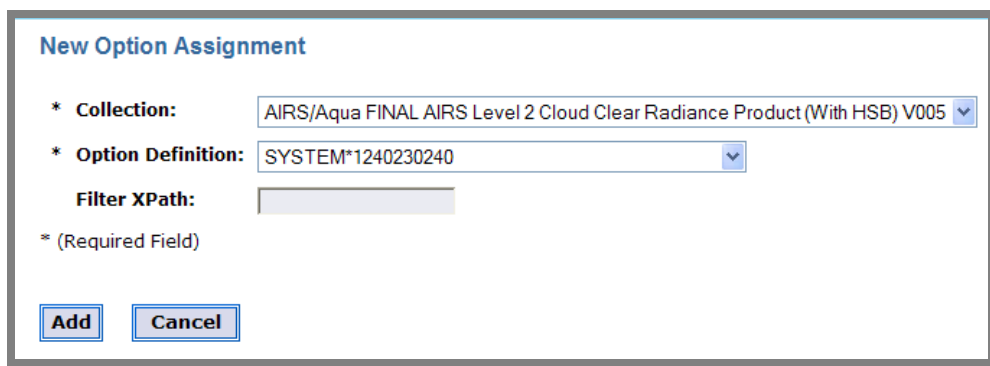
- 3) There may or may not be option assignments (see Figure 127)
- 4) Click the "Cancel" button to return



The screenshot shows the 'Option Assignments' window. It has a title bar. Below the title is the text 'There are no option assignments.' Below this text are two buttons: 'Add New Option Assignment' and 'Cancel'.

Figure 127. Option Assignment Screen

- b. **Add New Option Assignment.** To add a new option assignment, you must first get to the "Option Assignments" page (see Figure 127)
 - 1) Click the "Add New Option Assignment"
 - 2) The "New Option Assignment" screen appears (see Figure 128)



The screenshot shows the 'New Option Assignment' window. It has a title bar. Below the title are three fields: '* Collection:' with a dropdown menu showing 'AIRS/Aqua FINAL AIRS Level 2 Cloud Clear Radiance Product (With HSB) V005', '* Option Definition:' with a dropdown menu showing 'SYSTEM*1240230240', and 'Filter XPath:' with a text input field. Below these fields is a note '* (Required Field)'. At the bottom are two buttons: 'Add' and 'Cancel'.

Figure 128. New Option Assignment Screen

- 3) Click the "Cancel" button at any time to cancel the add operation
- 4) Required fields are marked with an asterisk (*).
- 5) Select the "Collection" for the option assignment
- 6) Select the "Option Definition" to be used for the assignment. If you are not an Administrator, you may not select a SYSTEM option definition.
- 7) Enter the "Filter XPath"
- 8) When done, click the "Add" button

- 9) Data validation will take place against the values you entered. If there is an error, an error message will be displayed (see Figure 129). Correct the errors and click the "Add" button again. The add will not be complete until all entered data passes data validation

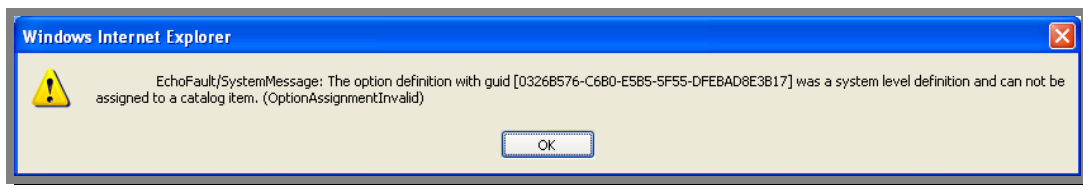


Figure 129. Invalid Option Definition Chosen

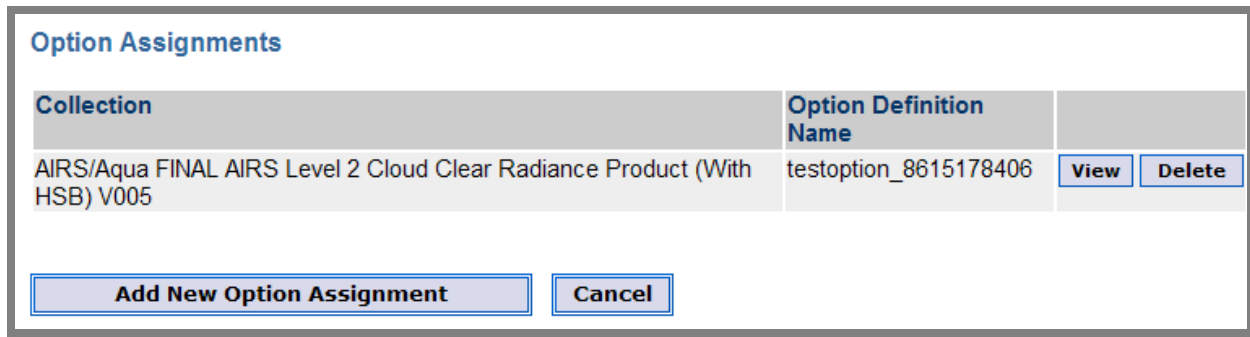


Figure 130. New Option Assignment

- 10) The new option assignment is now displayed (see Figure 130)
- c. **Delete an Option Assignment.** To delete an option assignment:
- 1) Click the "Delete" button next to the item you wish to delete.
 - 2) A delete confirmation box appears

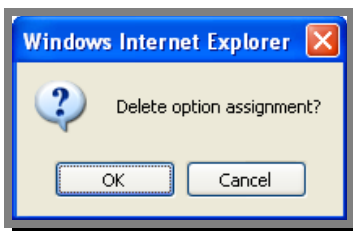


Figure 131. Delete Option Assignment Confirmation Box

- a) Click "OK" to continue deletion
- b) Click "Cancel" to cancel the operation

3.7.8 User Lookup

The User Lookup function is used to find a user's organization and login information for user's with the same provider role as the user performing the lookup. There are two ways to lookup a user:

- Using their User Name
- Using their First and Last Names

To get to the main User Lookup screen, click the "User Lookup" link on the left navigation panel under the "Provider Context" tab. The "User Lookup" screen is displayed.

3.7.8.1 Lookup User Name

To perform this lookup:

- a. Enter the First Name and Last Name of the user. Optionally, you may also enter the user's "Organization"
- b. Click the "Lookup User Name" button.
- c. If no match is found, a message is displayed on the screen
- d. If a match is found, the User Names, First Name, Last Name, Organization, and Email Address of each user name that matches the First & Last Names is displayed
- e. Click the "Cancel" button to return

3.7.8.2 Lookup User Information

To perform this lookup:

- a. Enter the User Name of the user for whom you are looking up
- b. Click the "Lookup User Information" button
- c. If no match is found, a message is displayed on the screen
- d. If a match is found, the User Name, First Name, Last Name, Organization, Email Address, and whether the user wishes to receive periodic mailings from ECHO are displayed
- e. Click the "Cancel" button to return

3.8 User Management (Administrators Only)

Administrators have the capability to administer to any user in the ECHO system. These functions are contained in the "User Management" tab and include the following:

- "Act as" any user in ECHO (this allows the Administrator to make any necessary changes to a user's account)
- Grant/Revoke Administrator Privileges to other users
- Delete User
- Reset a User's Password
- Lookup any User in ECHO
- Activate Providers
- Activate SSL
- Generate a Group Report

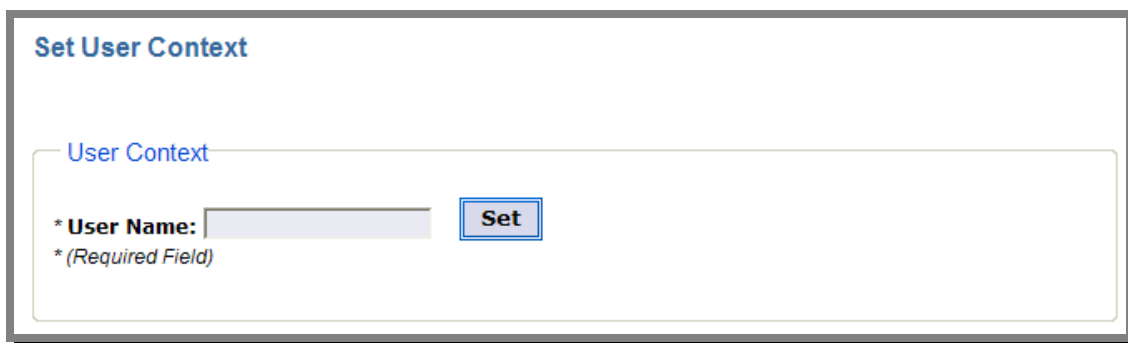
Each of these functions can be found in the left navigation panel of the "User Management" tab.

3.8.1 Set User Context

This is used to allow an Administrator to be seen by ECHO as another user. This allows the Administrator to perform any actions the user is has permissions for and to make any necessary changes to the user's account. Once the Administrator sets his context to the other user, ECHO will "see" him as that user. If the user is not an Administrator, then he will no longer have Administrative privileges until he leaves the user context and reverts to his own account.

To change your user context"

- Click the "Set User Context" link on the left navigation panel in the "User Management" tab (see Figure 132)
- The "Set User Context" screen appears.
- Enter the UserName of the user you wish to "act as"
- Click the "Set" button
- Note the "Set User Context" link is now a "Leave User Context" link
- To revert back to your account, either log off and log back on or click the "Leave User Context" link



Set User Context

User Context

* User Name: **Set**

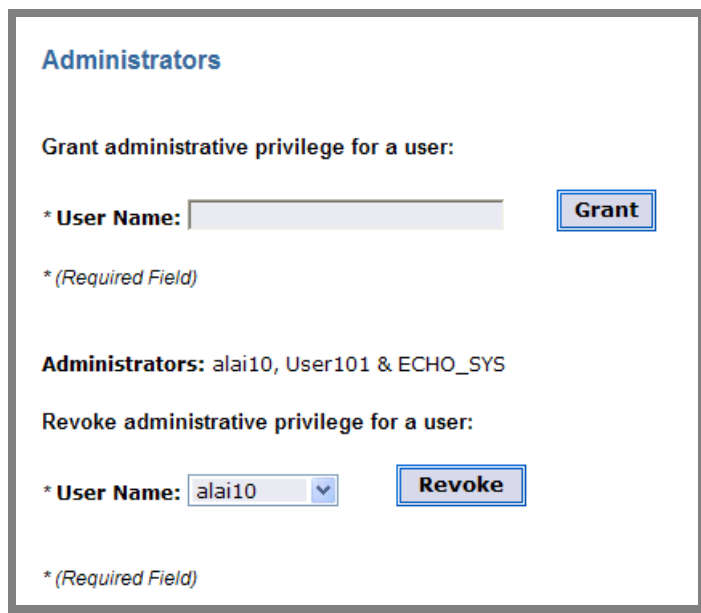
* (Required Field)

Figure 132. Set User Context Screen

3.8.2 Grant/Revoke Administrator Privileges

Not only does this function allow you to grant or revoke administrative privileges to users, but it also lists all users that have Administrative privileges in ECHO. This is the initial screen ("Administrators" screen) displayed when choosing the "User Management" tab (see Figure 133).

- a. To grant administrative privileges:
 - 1) Click the "Administrators" link on the left navigation panel in the "User Management" tab (see Figure 132)
 - 2) Enter the UserName of the user for whom you are granting Administrative access in the box next to the "Grant" button
 - 3) Click the "Grant" button
 - 4) The user will not have administrative privileges and his User Name will appear in the list of Administrators
- b. To revoke administrative privileges:
 - 1) Click the "Administrators" link on the left navigation panel in the "User Management" tab (see Figure 132)
 - 2) Select the UserName of the user for whom you are revoking Administrative access from the drop down list of all users with Administrative access in the box next to the "Revoke" button
 - 3) Click the "Revoke" button
 - 4) The user will no longer have administrative privileges and his User Name will no longer appear in the list of Administrators



Administrators

Grant administrative privilege for a user:

* User Name: **Grant**

* (Required Field)

Administrators: alai10, User101 & ECHO_SYS

Revoke administrative privilege for a user:

* User Name: **Revoke**

* (Required Field)

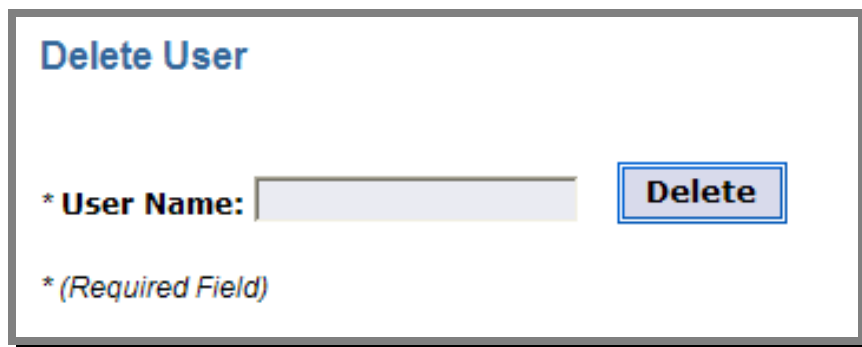
Figure 133. Grant/Revoke Administrative Privileges

3.8.3 Delete User

Administrators may delete users from ECHO. This allows them to clean up the user base for both system resource savings but also as a security measure. If a User Name is no longer in use, it should be deleted as soon as possible to prevent possible unauthorized use.

To delete a user:

- a. Click the "Delete User" link on the left navigation panel in the "User Management" tab (see Figure 132)
The "Delete User" screen appears (see Figure 134)
- b. Enter the User Name of the user you are deleting
- c. Click the "Delete" button
- d. The user will be deleted from ECHO



Delete User

* User Name: **Delete**

* (Required Field)

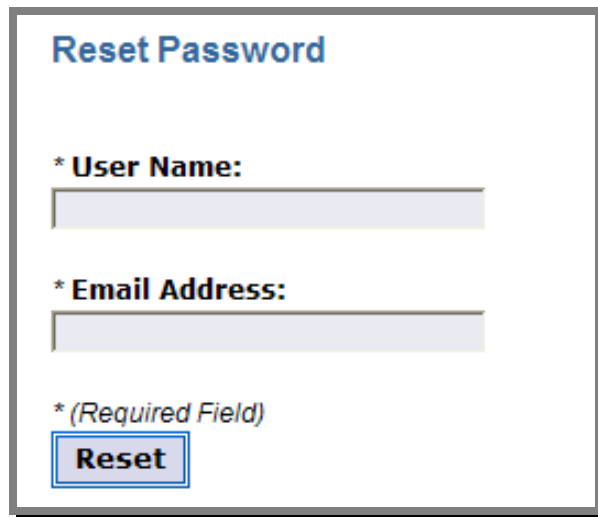
Figure 134. Delete User Screen

3.8.4 Reset Password

Administrators may reset the password for any ECHO user. This is necessary when a user has forgotten his password.

To reset a user's password:

- a. Click the "Reset Password" link on the left navigation panel in the "User Management" tab (see Figure 132)
The "Reset Password" screen appears (see Figure 135)
- b. Enter the User Name of the user you are resetting the password for
- c. Enter the Email Address of the user associated with the user's account
- d. Click the "Reset" button
- e. ECHO verifies the Email address matches the Email Address associated with the User Name (in the user's profile)
- f. If the two do not match
 - 1) An error message is displayed
 - 2) The password remains unchanged
- g. If the two do match,
 - 1) The user's password is reset to a randomly generated password
 - 2) The new password is emailed to the user



Reset Password

*** User Name:**

*** Email Address:**

*** (Required Field)**

Reset

Figure 135. Reset Password Screen

3.8.5 User Lookup

The User Lookup function is used to find a user's organization and login information. There are two ways to lookup a user:

- Using their User Name
- Using their First and Last Names

To get to the main User Lookup screen, click the "User Lookup" link on the left navigation panel under the "Provider Context" tab (see Figure 132).

The "User Lookup" screen is displayed (see Figure 136)

The screenshot shows the "User Lookup" screen with two main panels. The left panel, titled "Lookup User Name", contains three input fields: "* First Name:", "* Last Name:", and "Organization:". Below these fields is a button labeled "Lookup User Name" with a note "* (Required Field)" above it. The right panel, titled "Lookup User Information", contains one input field: "* User Name:". Below this field is a button labeled "Lookup User Information" with a note "* (Required Field)" above it.

Figure 136. User Lookup Screen

3.8.5.1 Lookup User Name

To perform this lookup:

- Enter the First Name and Last Name of the user. Optionally, you may also enter the user's "Organization" (see Figure 137)

This screenshot shows the "User Lookup" screen with the "Lookup User Name" panel filled out. The "* First Name:" field contains "Judith", the "* Last Name:" field contains "Wright", and the "Organization:" field is empty. The "Lookup User Name" button is highlighted. The "Lookup User Information" panel remains empty.

Figure 137. Lookup User Name

- Click the "Lookup User Name" button.

- c. If no match is found, a message is displayed on the screen (see Figure 138)

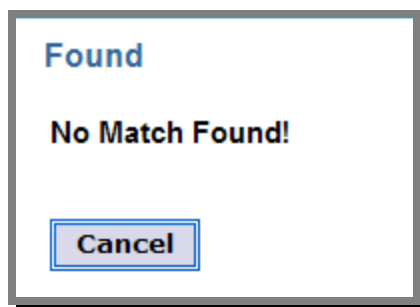


Figure 138. No Match Found

- d. If a match is found, the User Names, First Name, Last Name, Organization, and Email Address of each user name that matches the First & Last Names is displayed (see Figure 139)

User Lookup

Lookup User Name

* First Name:

* Last Name:

Organization:

*(Required Field)

Lookup User Information

* User Name:

*(Required Field)

Found

Match(es) Found!

User ID	Last Name	First Name	Organization	Email Address
User101	Operations	ECHO	ECHO	echotest@gst.com

Figure 139. Successful User Name Search

- e. Click the "Cancel" button to return

3.8.5.2 Lookup User Information

To perform this lookup:

- a. Enter the User Name of the user for whom you are looking up (see Figure 140)

User Lookup

Lookup User Name

* First Name:

* Last Name:

Organization:

* (Required Field)

Lookup User Name

Lookup User Information

* User Name:

* (Required Field)

Lookup User Information

Lookup User Info

Figure 140. Lookup User Information

- b. Click the "Lookup User Information" button
- c. If no match is found, a message is displayed on the screen
- d. If a match is found, the User Name, First Name, Last Name, Organization, Email Address, and whether the user wishes to receive periodic mailings from ECHO are displayed (see Figure 141)

User Information

Found Information for "User101" !

User ID:	User101
Last Name:	Operations
First Name:	ECHO
Organization:	ECHO
Receive Periodic Informational Email from ECHO:	true
Email Address:	echotest@gst.com

Cancel

Figure 141. Successful User Information Search

- e. Click the "Cancel" button to return

3.8.6 Activate Provider

When a user wishes to become a provider in ECHO, they submit a registration request. However, approval is not automatic. All provider requests must be reviewed by the ECHO Operations Team prior to approval. Once a request has been approved, the provider is activated using the "Activate Provider" screen.

Note that to activate a provider, you will need the temporary Provider ID assigned to the requestor. This temporary ID was emailed to both the provider and ECHO Operations at the time the request was submitted. Additionally, a permanent Provider ID must have been obtained. Both of these fields are required.

If the provider is to be a Data Provider, a provider schema must have been setup; you will need the name of this schema. Finally, the Data Center ID for the Data Provider must also be known.

As of Release 10.0 of ECHO, the Data Center ID and the Provider ID must be the same.

To get to the "Activate Provider" screen, click the "Activate Provider" link on the left navigation panel under the "Provider Context" tab (see Figure 132).

The "Activate Provider" screen appears (see Figure 142)

To activate a provider:

- a. Enter the temporary Provider ID of the requestor in the "Provider GUID" box
- b. Enter the permanent Provider ID in the "Provider ID" box
- c. If the provider is a Data Provider, enter the provider's schema name in the "Provider Schema Name" box
- d. If the provider is a Data Provider, enter the Data Center ID in the "Data Center ID" box
- e. Click the "Activate Provider" button
- f. A confirmation box is displayed.
 - 1) Click the "Cancel" button to cancel the activation
 - 2) Click the "OK" button to continue with the activation

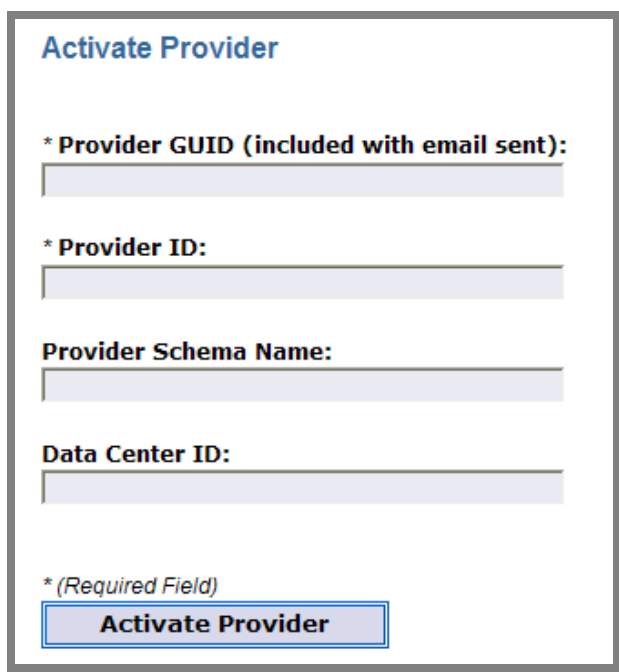


Figure 142. Activate Provider Screen



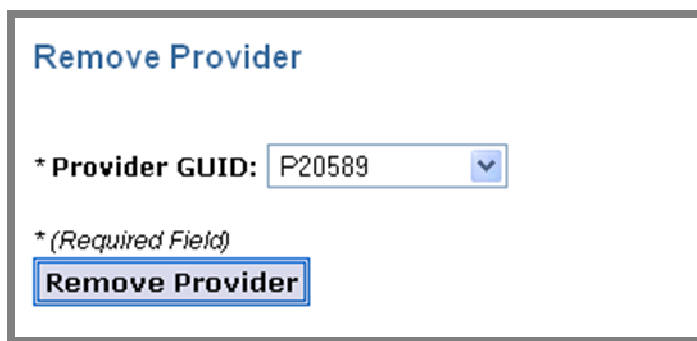
Figure 143. Activate Provider Confirmation Box

3.8.7 Remove a Provider

Administrators may remove providers from ECHO. This allows them to clean up inactive providers in the system. Providers with entities such as orders, data access rules, catalog item options, and/or extended services can not be removed from the system. When providers are removed, if there is an existing data schema for that provider the data schema will not be removed from the system, and the provider and associated business schema data will not be archived during removal

To remove a provider:

- g. Click the "Remove Provider" link on the left navigation panel in the "User Management" tab
The "Remove Provider" screen appears (see Figure 144)
- h. Enter the Provider GUID of the provider you are removing
- i. Click the "Remove Provider" button
- j. The provider will be removed from ECHO



Remove Provider

* **Provider GUID:** ▼

* (Required Field)

Remove Provider

Figure 144. Remove Provider Screen

3.8.8 Activate SSL

Order processing must be done over a Secure Socket Layer (SSL). The provider must submit his certificate for approval via his Provider Policies. The provider's SSL certificate must be approved by ECHO Operations before it can be used. Once the new or changed certificate has been approved, ECHO Operations must activate the certificate before ECHO will use it for order processing.

Anytime an SSL certificate is changed, it will be deactivated and ECHO Operations will be notified.

To get to the "Activate SSL Certificate for Provider" screen, click the "Activate SSL" link on the left navigation panel under the "Provider Context" tab (see Figure 132).

The "Activate SSL Certificate for Provider" screen appears (see Figure 146)

To activate a the certificate for a provider

- a. Select the Provider ID from the drop down list
- b. Click the "Activate SSL Certificate" button
- c. A confirmation box is displayed
 - 1) Click the "Cancel" button to cancel the activation
 - 2) Click the "OK" button to continue with the activation

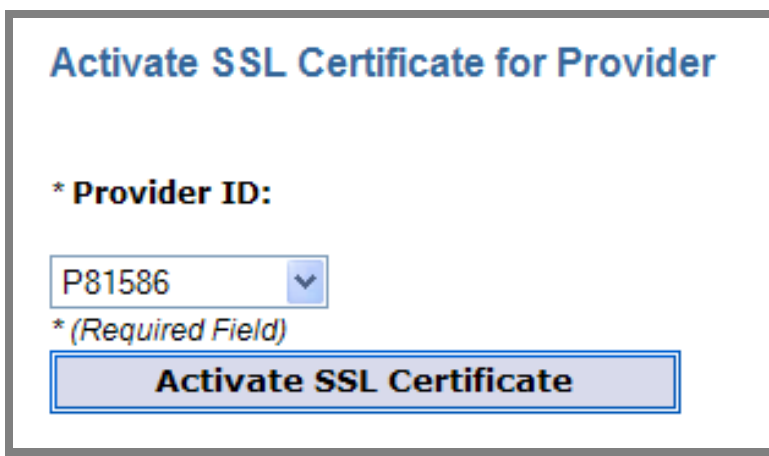


Figure 145. Activate SSL Certificate

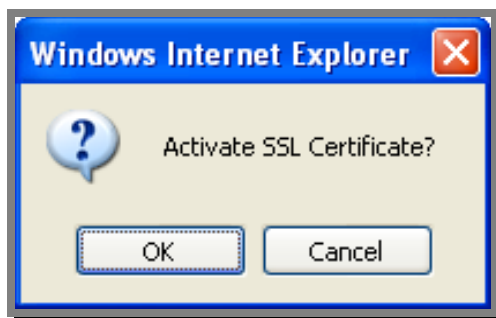


Figure 146. Activate SSL Certificate Confirmation Box

3.8.9 Group Report

Administrators have the capability of running a report showing all groups.

To run the Group Report, click the "Group Report" link on the left navigation panel under the "Provider Context" tab (see Figure 132).

The "Group Report" screen appears with the report of all groups (see Figure 147)

Group Report (All)			
Name	Description	Managers	Members
Z**4886799858	*** Test group. ***	Z786843047 (Bug Tester) Z141449544 (Bug Tester)	Z315021788 (Bug Tester) Z385597300 (Bug Tester)
Z**9167558178	*** Test group. ***	Z464916502 (Bug Tester) Z505297593 (Bug Tester)	Z467043010 (Bug Tester) Z754580520 (Bug Tester)
Z**2669147820	*** Test group. ***	Z866275189 (Bug Tester) Z686594437 (Bug Tester) Z420363612 (Bug Tester)	Z469641666 (Bug Tester) Z784797507 (Bug Tester) Z487475698 (Bug Tester)
Z**3787442492	*** Test group. ***	Z660587969 (Bug Tester) Z908992000 (Bug Tester)	Z438405085 (Bug Tester) Z118816065 (Bug Tester)
Z**2975752199	*** Test group. ***	Z493998600 (Bug Tester) Z339230139 (Bug Tester)	Z478816251 (Bug Tester) Z810669048 (Bug Tester)
Z**6313644671	*** Test group. ***	Z706273778 (Bug Tester) Z657193509 (Bug Tester)	Z258743977 (Bug Tester) Z685869561 (Bug Tester)

Z**5891795758	*** Test group. ***	Z247077855 (Bug Tester) Z145776998 (Bug Tester)	Z153412052 (Bug Tester) Z303261540 (Bug Tester)
Z**8655726228	*** Test group. ***	Z899961814 (Bug Tester) Z266347386 (Bug Tester)	Z271081244 (Bug Tester) Z481555678 (Bug Tester)
Z**1984393398	*** Test group. ***	Z934565843 (Bug Tester) Z756123706 (Bug Tester)	Z701654104 (Bug Tester) Z447271466 (Bug Tester)
Z**5840725635	*** Test group. ***	Z336395416 (Bug Tester) Z468171493 (Bug Tester)	Z252737250 (Bug Tester) Z711690946 (Bug Tester)
Z**4325279189	*** Test group. ***	jsmith (John Data)	
Z**8202753702	*** Test group. ***	jsmith (John Data)	
Z**9817231467	*** Test group. ***	jsmith (John Data)	
Z**1410120042	*** Test group. ***	jsmith (John Data)	
Z**4225418110	*** Test group. ***	jsmith (John Data)	

Figure 147. Group Report

APPENDIX A. ACRONYMS USED IN ECHO

Acronyms used in this document are contained in this appendix. A complete list of the acronyms frequently used in discussions of ECHO can be found on the ECHO website on the ECHO Acronyms page at http://www.echo.nasa.gov/overview/over_acronyms.shtml.

ACL	Access Control List
API	Application Programming Interface
AQL	Alternative Query Language
ASF DAAC	Alaska Satellite Facility DAAC
ASTER	Advanced Spaceborne Thermal Emission and Reflection Radiometer
BMGT	Bulk Metadata Generation Tool
COTS	Commercial Off The Shelf
DAAC	Distributed Active Archive Center
DB	DataBase
DTD	Document Type Definition
ECHO	EOS Clearinghouse
ECS	EOSDIS Core System
EDC	EROS Data Center
EDG	EOS Data Gateway
EJB	Enterprise JAVA Beans
EMD	EOSDIS Maintenance and Development
EOS	Earth Observing System
EOSDIS	EOS Data and Information System
EROS	Earth Resources Observation Systems
ESDIS	Earth Science Data and Information System
ESIP	Earth Science Information Partner
ETC	ECHO Technical Committee
FTP	File Transfer Protocol
GCMD	Global Change Master Directory
GES DAAC	GSFC Earth Sciences DAAC
GHRC	Global Hydrology Resource Center
GIS	Geographic Information System
GML	Geography Markup Language
GMT	Greenwich Mean Time
GSFC	Goddard Space Flight Center
GUI	Graphical User Interface
GUID	Globally Unique Identifier

IIMS	Independent Information Management Subsystem
J2EE	Java 2 Enterprise Edition
LAADS	Level 1 and Atmosphere Archive and Distribution System
LP DAAC	Land Processes DAAC
MISR	Multangle Imaging SpectroRadiometer
MODIS	Moderate Resolution Imaging Spectroradiometer
NASA	National Aeronautics and Space Administration
NSIDC DAAC	National Snow and Ice Data Center DAAC
ODL	Object Description Language
OGC	OpenGIS Consortium
ORNL DAAC	Oak Ridge National Laboratory DAAC
PGE	Product Generation Executives
PO.DAAC	Physical Oceanography DAAC
PSA	Product Specific Attribute
PUMP	Provider User Management Program
QA	Quality Assurance
SEDAC	Socioeconomic Data and Applications Center
SOAP	Simple Object Access Protocol
SSC	Stennis Space Center
SSL	Secure Sockets Layer
UDDI	Universal Description, Discovery, and Integration
UI	User Interface
UR	Universal Reference
UR	Uniform Resource Identifier
URL	Uniform Resource Locator
UTC	Universal Time, Coordinated (also called GMT/UTC)
WIST	Warehouse Inventory Search Tool
WGS	World Geodetic System
WRS	Worldwide Reference System
WSDL	Web Services Description Language
XML	eXtensible Markup Language
XSLT	eXtensible Style Language Transformation

APPENDIX B. DATA ENTITIES

B.1 User Profile

a. Profile

- 1) User Name/User ID
- 2) Full Name
- 3) Organization
- 4) Domain (sector of the user community you are associated with)
- 5) Region (USA or international user)
- 6) Primary Area of Study
- 7) User Type
- 8) Email
- 9) Whether the user wishes to receive system status and other informational email from ECHO
- 10) Roles
- 11) Date the User Name was created

b. Phone Number(s)

For each Phone Number:

- 1) Phone Type*
 - a) Drop down list
 - b) Values: Business, Business_2, Business_Fax, Home, Home_2, Home_Fax, Mobile, Pager, Custom
 - c) If Custom is picked, a box appears labeled "Custom Type Name"
 - d) "Custom Type Name" is required when the Phone Type = Custom
- 2) Phone Number*

c. User Address(es)

For each address:

- 1) Address Name
- 2) Up to 5 street address lines
- 3) City
- 4) State
- 5) Zip/Postal Code
- 6) Country
- 7) Special Instructions

B.2 User Preferences

B.2.1 Account/Personal Information

In the following descriptions, fields marked with an asterisk (*) are required in ECHO.

- a. Account Information
 - 1) User Name/User ID
 - 2) Password*
 - a) Minimum 10 characters
- b. Personal Information
 - 1) Title (*New field with ECHO 10*)
 - a) Drop down list
 - 2) First Name*
 - 3) Middle Initial (*New field with ECHO 10*)
 - a) One letter
 - b) A – Z and a – z
 - 4) Last Name*
 - 5) Do you wish to receive periodic informational emails form ECHO? (check the box for "Yes")
 - 6) Email Address*
 - 7) Organization*
 - 8) Organization*User Domain*
 - a) Drop down list
 - b) Values: Government, K12, University, Commercial, Other
 - 9) User Region*
 - a) Drop down list
 - b) Values: USA, International
 - 10) Primary Study Area*
 - a) Drop down list
 - b) Values: See PUMP (too many to list here)
 - 11) User Type*
 - a) Drop down list
 - b) Values: Production User, Science Team, QA/Testing User, Data Provider Internal User, Public User

B.3 Addresses

All addresses, whether Mailing, General Contact, Shipping Contact, or Billing Contact, have the same basic fields. Addresses are found in Registering with ECHO (section 3.3.2), Registering as a Provider (section 0), User Profile (section 3.4), and User Preferences (section e). Fields marked with an asterisk (*) are required. Items marked with a † are required IF the address is a US-formatted address.

- a. Address Name*
 - 1) Maximum 100 characters

- b. US Address Format* (check the box of "Yes")

Note that Street1, Street2, Street3, Street4, and Street5 may contain up to 1024 characters each.

- c. Street1*
- d. Street2
- e. Street3
- f. Street4
- g. Street5

Note that City and State may contain up to 100 characters each.

- h. City*
- i. State†
- j. Zip/Postal Code†
 - 1) Maximum 20 characters
- k. Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

- 1) Drop down list
 - 2) If OTHER is selected, a "Custom Country Name" field appears
 - a) Maximum 40 characters
- l. Special Instructions
 - 1) Special instructions related to this address as supplied by the user such as "Leave packages with the front desk".
 - 2) Maximum 1024 characters

B.4 Phone Numbers

As with addresses, all phone numbers have the same format. Fields marked with an asterisk (*) are required.

- a. Phone Type*
 - 1) Drop down list
 - 2) Values: Business, Business_2, Business_Fax, Home, Home_2, Home_Fax, Mobile, Pager, Custom
 - 3) If Custom is picked, a box appears labeled "Custom Type Name"
 - 4) "Custom Type Name" is required when the Phone Type = Custom
- b. Phone Number*

B.5 Provider Information

In the following descriptions, fields marked with an asterisk (*) are required.

- a. Organization*
- b. Provider Type*
 - 1) Drop down list
 - 2) Values:
 - a) Data—provider offers data such as collections and granules

-
- b) Service—provider offers web services such as interfaces, implementations, advertisements, or GUIs
 - c. Discovery URLs*—identifies a provider web site
 - 1) Multiple URLs allowed
 - 2) Separate URLs with a semicolon (;)
 - d. Description of Holdings*—description of the type of data holdings the provider maintains
 - e. Description of Services
 - f. Additional Information
 - g. Contact Information
 - 1) Title (*New field with ECHO 10*)
 - a) Drop down list
 - 2) First Name*
 - 3) Middle Initial (*New field with ECHO 10*)
 - a) One letter
 - b) A – Z and a – z
 - 4) Last Name*
 - 5) Role*—user's role in the provider's organization
 - 6) Email Address*
 - h. Phone Number
 - 1) Phone Type*
 - a) Drop down list
 - b) Values: Business, Business_2, Business_Fax, Home, Home_2, Home_Fax, Mobile, Pager, Custom
 - c) If Custom is picked, a box appears labeled "Custom Type Name"
 - d) "Custom Type Name" is required when the Phone Type = Custom
 - 2) Phone Number*
 - i. Mailing Address
 - 1) Address Name*
 - a) Maximum 100 characters
 - 2) US Address Format* (check the box of "Yes")
Note that Street1, Street2, Street3, Street4, and Street5 may contain up to 1024 characters each.
 - 3) Street1*
 - 4) Street2
 - 5) Street3
 - 6) Street4
 - 7) Street5
Note that City and State may contain up to 100 characters each.
 - 8) City*
 - 9) State†

10) Zip/Postal Code†

- a) Maximum 20 characters

11) Country*

Change with ECHO 10: Country is now Country Name, not Code. A free form option (OTHER) is also provided to enter a country that is not in the drop down list

- a) Drop down list
- b) If OTHER is selected, a "Custom Country Name" field appears (see **Error! Reference source not found.**)
 - (1) Maximum 40 characters

12) Special Instructions

- a) Special instructions related to this address as supplied by the user such as "Leave packages with the front desk".
- b) Maximum 1024 characters

How To Use PUMP

Account Entity						
Element Name	Description	Format	Required	Unique	Multiplicity	Notes
Account Information:						
User ID/User Name	User's user ID used to access ECHO	String(30)	Y	Y	1	Maximum 30 characters
Password	Password associated with the User ID/User Name	String(40)	Y	Y	1	Minimum 10 and Maximum 40 characters Must include at least three types of the following: <ul style="list-style-type: none"> • Uppercase letter • Lowercase letter • Digit • Special Characters
User Profile/Personal Information:						
Title	User's title (e.g., Mr., Ms, Dr.)	String(5)	N	N	1	Drop down menu in PUMP Free text field also available
First Name	User's first name	String(20)	Y	N	1	
Middle Initial	User's middle initial	String(1)	N	N	1	
Last Name	User's last name	String(20)	Y	N	1	
Organization/Affiliation	Name of Organization	String(1024)	Y	N	1	
Email Address	User's email address	String(256)	Y	N	1	
User Domain	Government, University, etc.	Enumerated	Y	N	1	Valid Values: <ul style="list-style-type: none"> • Government • K12 • University • Commercial • Other In ECS this is known as the user's Affiliation <ul style="list-style-type: none"> • Drop down menu in PUMP.
User Region	The region the user is located in	Enumerated	Y	N	1	Valid Values: <ul style="list-style-type: none"> • USA—United States of America • INTERNATIONAL—Any country other than USA • Drop down menu in PUMP

Account Entity						
Element Name	Description	Format	Required	Unique	Multiplicity	Notes
User Type		Enumerated	Y	N	1	Drop down menu in PUMP
Informational Flag/Opt In	Flag indicating whether the user wishes to receive periodic informational emails from ECHO	Boolean	N	N	1	Defaults to "No" Checkbox in PUMP In PUMP, defaults to "No" if not checked
Primary Area of Study	Research field	Enumerated	N	N	1	<p><i>Valid Values:</i></p> <ul style="list-style-type: none"> • AIR_SEA_INTERACTION • ATMOSPHERIC_AEROSOLS • BIOGEOCHEMICAL_DYNAMICS • BIOLOGICAL_OCEANOGRAPHY • CLOUDS • CRYOSPHERIC_STUDIES • GEOPHYSICS • GLOBAL_BIOSPHERE • HUMAN_DIMENSIONS_OF_GLOBAL_CHANGE • HYDROLOGIC_CYCLE • LAND_PROCESSES • PHYSICAL_OCEANOGRAPHY • POLAR_PROCESSES • RADIATION_BUDGET • SEA_ICE • TROPOSPHERIC_CHEMISTRY • UPPER_ATMOSPHERE_COMPOSITION • UPPER_ATMOSPHERE_DYNAMICS • OTHER Drop down menu in PUMP

Account Entity						
Element Name	Description	Format	Required	Unique	Multiplicity	Notes
Address Information: <i>(No limit on # of addresses)</i>						
Address	Various addresses (mailing, shipping, contact, etc)	ADDRESS Entity	N	N	Unbounded	<ul style="list-style-type: none"> The initial address entered when a user registers is the user's contact address Additional addresses may be added once account is created via "Add New Address" under the "Addresses" tab ECHO has no limit on number of addresses
General Contact, Shipping Contact, Billing Contact	Various contact addresses	CONTACT Entity	N	N	Unbounded	<ul style="list-style-type: none"> Contacts may be added once account has been created via the "Add ... Contact" under "User Preferences" tab ECHO has no limit on number of addresses
Other:						
GUID	The unique id assigned by ECHO for this	String	N/A	Y	1	Set by ECHO system
Creation Date	Date account was created	dateTime	N/A	N	1	Set by ECHO system
Roles	The roles the user has been granted The roles currently include one or more provider roles and an admin role.	List of ROLE Entity	N	N	List	Not set/updated during Register or Update Profile; set by Provider (provider role only) or Administrator only
** Format may reference another Data Entity (shown as all caps). dateTime, Boolean, Float, Int, & String are basic XML primitive types. See the XML Schema specification for more information						